COMPREHENSIVE TEST BAN TREATY: DOES US RATIFICATION HOLD THE KEY FOR ITS ENTRY INTO FORCE?

A Thesis
submitted to the Faculty of the
Graduate School of Arts and Sciences
of Georgetown University
in partial fulfillment of the requirements for the degree of Master of Arts in Security Studies

By

Victoria M. Salegna

Washington, DC
November 19, 2010
# Table of Contents

Introduction.................................................................................................................................................. 1
Origin of the CTBT....................................................................................................................................... 3
Annex 2 States, A Background .................................................................................................................... 4
US ratification, believed to be key ................................................................................................................ 11
US security decisions are not modeled ........................................................................................................ 16
US not key to treaty success ......................................................................................................................... 23
How states may make nuclear decisions ..................................................................................................... 26
Policy Considerations .................................................................................................................................. 29
Conclusion .................................................................................................................................................... 30
Bibliography .................................................................................................................................................. 32
Introduction

The Comprehensive Test Ban Treaty (CTBT) is an international agreement banning the testing of nuclear devices. On 24 September 1996 the UN first opened the treaty for signatures by the United Nations, garnering 71 signatures initially. Today, more than 150 countries have become signatories to the treaty. Despite a US signature during the Clinton administration, the treaty has not yet been ratified by the Senate. While the United States abides by the CTBT’s principles against nuclear testing, there remains a push by the international community for ratification to formally recognize this practice. Coupled with the Nuclear Non-Proliferation Treaty (NPT), the CTBT is seen by many world leaders as critical to global counterproliferation efforts. If the CTBT enters into force it will represent a codified global ban on testing, making it increasingly difficult for new states to enter the nuclear club. Without the ability to test it seems unlikely that a country would be able to present a credible nuclear deterrent; without a credible deterrent the pursuit of nuclear weapons becomes somewhat futile. With the arrival of a new administration in 2008, CTBT ratification appears again at the forefront of US political discussions and is a cornerstone of President Obama’s non-proliferation agenda.

In addition to US failure to ratify, a number of other nuclear nations have not yet signed and/or ratified the treaty. The CTBT has yet to enter into force and will not do so until 180 days after all 44 of the so-called Annex 2 states—states that were involved in the initial treaty negotiations and those that possessed nuclear reactors at the time—ratify the treaty. At this time, there are nine states that must ratify the treaty before it will enter into force. China, Egypt, Indonesia, Iran, Israel and the US have signed but not ratified the treaty. India, North Korea and
Pakistan are the remaining Annex 2 states that must sign and ratify the CTBT.\(^1\) More than 150 nations have ratified the treaty at present, indicating that a test ban has widespread global support.\(^2\) However, many of these states do not have active nuclear programs or nuclear ambitions, unlike the Annex 2 states that have thus far demurred on ratification. Some nonproliferation experts claim that US ratification is key to spurring treaty ratification by other holdout states. This paper examines the likelihood of US CTBT ratification influencing the decisions of other states through the use of relevant case studies.

Though the CTBT and testing bans have been a topic of discussion for a number of years, there is little literature discussing the future of this treaty in terms of international modeling of ratification decisions. Statements are made, both by academics and policymakers that the US is viewed as a leader in non-proliferation efforts and that US non-proliferation policies are mimicked globally but there is little research on the causal links behind these ideas. Is the US actually seen by other nations as a formative decision-maker when it comes to nuclear policy? Which states do follow or adopt US-backed policies? Do all states follow US decisions? Do other states model US actions related to defense related decisions or will they act in their own self-interest? This paper analyzes how states make nuclear or defense related decisions and will attempt to show that though some states may follow the US nuclear example, the key Annex 2 states are unlikely to follow US actions related to the CTBT, unless they deem that action to be in their own self-interest.


Some advocates of US ratification of the CTBT contend that US ratification will move holdout states such as India and Pakistan to ratify the CTBT. Though the US viewpoint does have cachet abroad, this paper assesses that US opinion alone is unlikely to prompt the holdout states to reconsider their positions on ratification. Indeed, India, Pakistan and North Korea have all tested nuclear weapons in the face of US protests. Israel has maintained a state of ambiguity about its nuclear arsenal but is assessed as another nuclear weapons state. Though attitudes in nations change, especially as leadership changes, it may be naive to think that US policy alone will have widespread ramifications on the defense postures of other states.

Though it is generally believed that the US is a leader in non-proliferation efforts, this paper will look at how influential US policy is abroad. US signature of the CTBT did not prompt similar behavior from the Annex 2 states. Moreover, a number of examples indicate that US actions alone do not dictate global policy. This paper will provide examples where US action has not spurred similar actions in other states with regards to non-proliferation efforts. It will also examine cases where there was a distinct lack of US action but treaties flourished; which will serve to show how other nations regard US actions when making decisions related to their own defense and security postures. Instead, these states will consider factors such as prestige, defense needs and domestic factors before weighing the US viewpoint in their decision calculus. This paper contends that US ratification of the CTBT will not prompt ratification of the treaty by the remaining Annex 2 states.

**Origin of the CTBT**

Moratoriums on testing existed in a number of forms since the 1960s. Some were public statements that had not been codified while others were formalized agreements like the Limited Test Ban Treaty. The CTBT would not only ban nuclear tests but was seen as a way to hedge
against nuclear proliferation. In 1993, negotiations began for what is today known as the CTBT.\textsuperscript{3} Between 1993 and 1996 a Conference on Disarmament Ad Hoc Committee wrote and re-wrote this document, hoping to formalize a global moratorium on nuclear testing. Though nations had discussed for a number of years a treaty of this kind, it was at urging from the UN that the Conference on Disarmament took hold of this mission.\textsuperscript{4} Moreover, in 1995 at Review and Extension Conference for the NPT, states decided to permanently extend the NPT, which initially was set to expire that year, also decided that to fulfill the goals of the NPT and to support continued efforts at thwarting proliferation a treaty banning nuclear tests was needed. This group called for a Comprehensive Test Ban Treaty and set 1996 as a goal date for the treaty to open for signature.\textsuperscript{5} There were several hotly contested issues, including whether some tests would be allowed under this treaty, though ultimately all were banned, as well as discussions about when entry into force would occur. It was then that the idea of the Annex 2 states was established and that their ratification would be needed for entry into force.\textsuperscript{6} The treaty then opened for signatures at the UN on 24 September 1996.

**Annex 2 States, A Background**

The states that remain as hold-out states are of little surprise to those with some knowledge of international security. Israel and Iran make fairly public their views on defense and warfare, as well as their concerns about regional security. In the last 15 years India, Pakistan and


\textsuperscript{4} ibid


North Korea have all tested nuclear weapons. It is important then to understand what roadblocks to CTBT ratification, outside of waiting for US ratification, may exist for these states. A limited understanding of the security considerations of each hold-out state is key to evaluating the relative importance of US ratification in this global context.

India will prove a hard case for CTBT ratification. It has deemed the CTBT and the NPT discriminatory to developing powers. The current nuclear powers had the opportunity to conduct numerous nuclear tests, with the US conducting more than 1000 tests, while states that came later to the nuclear game are chastised and ostracized for conducting a few nuclear tests.\(^7\) India’s claim is that until the US and other nuclear powers make good on their commitments to dismantle their nuclear stockpiles, their stance against nuclear testing and other nuclear weapons related developments is discriminatory.\(^8\) It seems unlikely that India will model decisions made by the US with regards to nuclear weapons, until the US begins to change some of its policies. India’s refusal to join the NPT highlights its willingness to flout international opinion and continue to make decisions that are best for its defensive posture, even if those decisions are at odds with international norms.

Pakistan will likely follow the same path as India with regards to its nuclear decisions. Afterall, that is a trend that is easy to spot in both Pakistan’s nuclear and ballistic missile development. India developed and tested nuclear weapons as well as ballistic missiles as a


delivery vehicle, which prompted Pakistan to pursue these options. Assuming this trend continues it will be India that influences Pakistan’s decision-making process related to the CTBT more than policies of any other government.

North Korea also showed the world that it was unlikely to support CTBT ratification, despite the views of other countries. A resolution in October 2009 was introduced at the UN General Assembly which reminded and encouraged hold-out states of the importance of CTBT ratification and acknowledged continued global support for this effort. A vote of 175 countries showed overwhelming support for this resolution. North Korea was the only nation at the UNGA to dissent on this resolution, while representatives from India, Mauritius and Syria abstained. Again, this shows that countries are willing to stand against the international community on the CTBT, nor do they see international support for a treaty to be the only factor worth considering when making defense related policy. North Korea has repeatedly shown that outcries from the US are irrelevant to their decision-making process having conducted nuclear tests and pulled out of the NPT. US ratification alone is not likely to be the sole stumbling block to North Korean ratification of the CTBT.

China conducted its last nuclear test in 1996, months before becoming the second country, after the US, to sign the CTBT. It has agreed to some monitoring and verification efforts related to the CTBT but has yet to ratify the treaty due to concerns related to intrusive


monitoring and exposure of defense-related secrets. Moreover, China has stated that it will wait for the US to ratify the CTBT before taking action.\textsuperscript{12} China is concerned with limiting itself militarily compared to other nuclear weapons states, in particular the US. The US recently proposed modernizing its stockpile and introducing a reliable replacement warhead into its nuclear arsenal, raising concerns that China would increase its efforts at nuclear modernization and possibly pursue future nuclear tests or at least keep the option of nuclear testing on the table.\textsuperscript{13} US action does appear relevant in the case of China; however, there is no guarantee that US ratification will end Chinese concerns ignited by the talk of RRW and result in China’s CTBT ratification.

In April 2010, Indonesian Foreign Minister Marty Natalegawa announce that his nation would ratify the CTBT without waiting for the US. This is a change in previous Indonesian policy, since 2002 Indonesian claimed to be waiting for US action on the CTBT.\textsuperscript{14} Leaders in Indonesia, a country without nuclear weapons, claimed that they expected those hold-out states with active weapons programs to take the first step toward ratification. Because these other states, including the US, failed to take action, Indonesia decided to move forward with ratification by the end of 2010 because of the importance of the CTBT to non-proliferation efforts. This case clearly highlights some of the key points of this paper. While the US is seen as


a global leader in non-proliferation efforts, states will act on their own if an issue is important enough.

Egypt has publicly expressed a number of concerns regarding CTBT ratification. In a 2001 statement before the CTBT Entry into Force Committee, Egypt noted two barriers to CTBT ratification, neither of which was waiting for US action. Egypt emphasized that though it was committed to nuclear non-proliferation, until it could be sure that its other neighbors in the Middle East, in particular Israel, could make the same commitments, it was unlikely that Egypt could support the CTBT. Moreover, much like India, Egypt also raised the issue of discriminatory policies and rhetoric coming from the nuclear weapons states that are NPT members. Until these states actually fulfill their NPT obligations to move towards disarmament and Israel joins the NPT, Egypt would likely refrain from ratifying the CTBT. The security situation in the Middle East and relationships among Egypt, Israel and Iran will likely be major factors in the decisions made by these countries, especially when Iran continues to have nuclear aspirations.

The case for Israeli ratification of the CTBT is very similar to Egypt. A negotiated peace in the Middle East would likely assuage many of Israel’s security concerns and make it more likely to ratify the CTBT. Israel does not want to limit its military development options, nor appear weak in the region, as compared to other countries in the Middle East. It seems unlikely that Israel will ratify the CTBT unless similar action has been agreed upon by other Middle East

---

based hold outs.\footnote{US Department of State. "Comprehensive Test Ban Treaty." \textit{Federation of American Scientists}. 8 Oct. 1999. Web. 17 Oct. 2010. \texttt{<http://www.fas.org/nuke/control/ctbt/news/fs_991008_adherence.htm>}.} If Iran continues to appear to pursue the nuclear option it seems unlikely that Israel, especially in the face of threats from Iran about its interests in wiping Israel off the map, would feel secure enough to ratify the CTBT. Moreover, as will be discussed later in the paper, Israel is not known for following US actions on the topic of nuclear weapons. The US repeatedly requested that Israel join the NPT and stop its pursuit of nuclear weapons—neither of which occurred.

Iran has not made any recent public statements about the CTBT. Like Israel, Iran has expressed concerns about the need for current nuclear weapons states to begin to disarm before it will take any non-proliferation treaties into serious consideration. However, Iran’s actions with regards to its possible nuclear weapons program seem to indicate that it is a)willing to flout international opinion and b)may not be willing to give up abilities like the option to conduct a nuclear test. Iran has denied IAEA inspectors full access to its nuclear facilities, constructed covert nuclear facilities in Qom and continues efforts to evade UN sanctions.\footnote{Sherwell, Philip. "Defiant Iran Insists There’s No Secret as Inspectors Invited to Qom Nuclear Site - Telegraph." \textit{Telegraph.co.uk} - \textit{Telegraph Online}. 26 Sept. 2009. Web. 07 Nov. 2010. \texttt{<http://www.telegraph.co.uk/news/worldnews/middleeast/iran/6235547/Defiant-Iran-insists-theres-no-secret-as-inspectors-invited-to-Qom-nuclear-site.html>}.} Iran does not seem overly concerned with falling into lockstep with the opinions of the rest of the global community, especially with regards to its nuclear program. Israel’s alleged nuclear weapons program and its stance on the CTBT is likely a key consideration for Iran when it comes to nuclear decisions.

In the US, the CTBT had been virtually neglected since the failed ratification during the Clinton administration. The George W. Bush administration was not a high point for non-
proliferation efforts and there was little discussion of CTBT ratification. While there were continued decreases in the US nuclear arsenal, Bush also sponsored research for the controversial Reliable Replacement Warhead (RRW) program—a program some analysts claimed would only prove viable with renewed nuclear testing, making CTBT ratification during his term seem somewhat unlikely. During this administration also abrogated the ABM treaty, raising questions about the possibility of a new arms race between the US and Russia. However, with a new administration comes a host of new initiatives and efforts.

The Obama administration has made a renewed commitment to non-proliferation. In a 5 April 2009 speech in Prague, newly elected President Barack Obama began to map out his plans for US policies for the US nuclear stockpile. In this keynote address, he noted that there are a number of initiatives that the US government will pursue related to nonproliferation. Obama stated that "...my administration will immediately and aggressively pursue US ratification of the Comprehensive Test Ban Treaty." A resurgence of interest by political leaders, including public support for these efforts from Vice-President Biden and Secretary of State Clinton, make now a key time to assess the relative impact of the CTBT on both the US and its impact globally, according to press reports.

---


The US Senate has previously rejected treaty ratification and some of the Senators who previously rejected the CTBT remain in office. While Obama will likely garner the support of his party members, he will probably face a difficult battle garnering a 2/3 majority needed for ratification and will likely need to court Republican votes to ensure ratification. Problems related to securing ratification of the START Treaty may also spell difficulties for the CTBT. Though the CTBT is already on the calendar of the Senate Foreign Relations Committee, it may languish there due to problems with START ratification. Under Secretary of State Ellen Tauscher underscored this point when noting that START was a first priority and that the CTBT would be sent to the Senate “when political conditions were right,” indicating that this treaty may again face a tough battle in the Senate.

US ratification, believed to be key

There are a number of reasons that may be cited as to why US ratification of the CTBT is thought to be essential for wider international support. Several of the remaining Annex 2 states have publicly professed that US ratification would likely encourage them to reconsider their stance on the CTBT. The US has a longstanding reputation as a leader in non-proliferation efforts. It is also recognized for helping to create norms against testing. But the question remains,

---


do these factors, such as being a leader in nuclear non-proliferation translate to actions by other nuclear powers?

Though these countries are likely to make their own decisions related to treaty ratification, there is probably some truth to the suggestion that states do look to the US in terms of security related decisions. Although it is unlikely that a state will make a complete policy reversal with regards to the CTBT, US ratification could help push states that are on the fence in the same direction. Indeed, for a number of years leaders in Indonesia suggested that they would ratify the CTBT once the US took the steps towards ratification. Although Indonesia has moved towards ratification absent US action, these statements do support claims that the US voice does have some international cachet.23

China has also publicly stated that it will support the CTBT, but only after US action.24 China regularly makes claims that it will follow US action on defense–related issues; however, these tend to be just that, claims, rather than actual actions by China. Though China may follow through with these public statements, there are also some indications that China has begun to modernize its nuclear arsenal, suggesting that it may want to keep the option to test in the future available. Additionally, if countries such as India or North Korea, which could pose regional threats to China keep the option to test and modernize their arsenals available (by refusing to ratify the CTBT), China may be hesitant to limit its nuclear options.


Furthermore, a number of international relations scholars posit that US ratification will prompt action by other nations. “U.S. ratification would be a circuit-breaker, having an immediate impact on the other CTBT hold-out states, and creating much new momentum in itself for the broader non-proliferation and disarmament agenda,” according to the International Commission on Nuclear Non-Proliferation and Disarmament.\(^\text{25}\) It is suggested that both Israel and Egypt will likely feel this pressure as key US allies.\(^\text{26}\) However, this suggestion seems somewhat suspect, since both nation often seem to make defense-related decisions that are contrary to US policy, especially with regards to Israel and its nuclear arsenal.\(^\text{27}\) Brent Scowcroft and Joseph Nye, in a recent article in Politico, also noted that the US is and should be a world leader when it comes to nuclear non-proliferation efforts and that US leadership is key to garnering more support for the CTBT.\(^\text{28}\) In addition to receiving support from a number of academics, a variety of international personalities, including current UN Secretary General Ban-Ki Moon, former UN weapons Inspector Hans Blix, and a number of foreign leaders, have supported claims that US ratification is key increasing CTBT ratification. At the opening of the 2010-1011 UN General Assembly meeting Moon, backed by more than 2 dozen foreign ministers reiterated that US support for the CTBT would like encourage hold-out states to move

\(^\text{25}\) Kimball CTBT briefing book.


towards ratification.\textsuperscript{29} Hans Blix made a public statement 2006 positing that if the US were to ratify the CTBT it would cause a domino effect, prompting ratification by India, Pakistan and China.\textsuperscript{30}

These statements by Blix and others, complement the idea that the US is a leader in nuclear non-proliferation efforts.\textsuperscript{31} There are a number of factors that suggest this notion may be true. The US is often one of the first countries to sign on or support new efforts to control the spread of nuclear technology, to include its support of the Nuclear Suppliers Group (NSG) and the NPT. The US government also has a number of agencies who devote much of their time to nuclear non-proliferation, including parts of the Department of State, Department of Energy, Department of Defense and the National Nuclear Security Agency.\textsuperscript{32} The US also encourages other nations to pursue nuclear non-proliferation efforts through a number of means, including both positive and negative inducements. These can include offers of increased trade and economic cooperation or threats of sanctions.\textsuperscript{33} The US voice is also assessed to be a key factor in garnering global support for policy initiatives like new UN Security Council sanctions.\textsuperscript{34} There are some that criticize the US commitment to non-proliferation because it has still not


\textsuperscript{32} Behrens, i

\textsuperscript{33} Behrens, 2

brought its nuclear stockpile down to zero but the US, along with Russia, has been a leader in stockpile reduction efforts, which will hopefully serve as a signal other nations that massive nuclear build-up is not key to a strong defense posture or credible deterrent.\textsuperscript{35}

In addition, the US has also endeavored to create a norm against testing. Though it has not codified this norm through CTBT ratification, the US has not conducted an atmospheric test since 1963 and has not conducted any underground nuclear tests since 1992, when it enacted a unilateral testing moratorium.\textsuperscript{36} The US was not the first nation to commit itself to a nuclear testing moratorium, (Russia in 1990 and Britain in 1991 confirmed that they would no longer conduct nuclear tests), but this was still a significant step in establishing global norms against nuclear tests.\textsuperscript{37} Additionally, the US was a leader in promoting the Limited Test Ban Treaty, the pre-cursor to the CTBT, which received international support. Though past successes in creating an environment that is unfavorable towards nuclear testing could indicate future US success with regards to the CTBT, it might prove unwise to think that past behavior guarantees future success.

Moreover, there are several problems with these scenarios presented above that suggest that US leadership in non-proliferation efforts in the past will guarantee modelling with regards to the CTBT that are often not addressed by foreign leaders or nuclear policy scholars. The first problem is that these press statements, especially those made my foreign ministers or dignitaries, are often stand alone soundbites. Though China may say it will model US actions, there is no


reason given as to why or how or when. There is also limited research regarding links between US action and international modeling of these efforts.

A second problem is the need for a domino effect to occur. For example, US ratification alone is unlikely to spur Pakistani action on the CTBT because there are a number of regional concerns that will likely take precedence. However, if US ratification leads to China ratifying, that could boost chances for Indian action, which in turn could lead to Pakistani ratification. So though US action may eventually lead to Pakistani ratification, it is only through actions of other states that this outcome might occur. Even if the US is a recognized leader in nuclear non-proliferation, its leadership may not be recognized by all states or may not be the only factor in the decision-making process, something that will be explored through the rest of this paper.

Much of the analysis of CTBT ratification and possible US importance does not stress how difficult it may be to get all the key states to ratify.

**US security decisions are not modeled**

Though the United States is generally accepted as a leader in non-proliferation efforts it is important to understand how widely this influence actually spreads. While the US may be able to direct the policies of a number of countries, the important question is, does US action on defense issues have impact on states like India, Iran, China, or North Korea. History seems to indicate that these countries do not always follow the US lead, especially on arms control related issues. These states may pay lip service to the US, vowing to support non-proliferation efforts, like China’s claim that it soon plans to ratify the CTBT, but these states do not always follow through with these promises, or find ways to put up roadblocks to success.\(^\text{38}\) Despite US efforts, no arms

---

control treaty has been able to claim a truly global success rate. All arms control treaties continue to have some hold-out states, so it seems unlikely that US support for the CTBT in particular will cause a sea-change in this arena.

The Nuclear Non-Proliferation Treaty (NPT) is a key example of the limited impact that the US voice can have. First established in 1970, the NPT’s goal was to limit the number of nuclear weapons states to the five declared nuclear powers: the US, Britain, France, China and Russia. Article VI of the treaty also calls for these states to move towards disarmament, creating a nuclear-free world.\(^{39}\) The US has repeatedly called upon states to join the NPT, which is seen as the center of global non-proliferation efforts, but a number of states continue to ignore these requests. Though the tenets of this treaty are generally applauded for efforts to prevent the spread of nuclear weapons, there are also a number of criticisms that have been levied by India, Pakistan, Israel and North Korea, preventing them from joining the NPT.

Though the complaints from each state vary slightly, their general theme remains the same. They have openly criticized the NPT for being discriminatory at its very core.\(^ {40}\) The treaty makes a distinction between nuclear weapons states and non-nuclear weapons states.\(^ {41}\) The critics of the NPT note that this is a somewhat arbitrary distinction. There is no rhyme or reason as to why it is acceptable for China to have nuclear weapons but not India, other than China did it first. Using this as a defense as to why some states are allowed to join the nuclear club but not others does not hold much water with these states, in particular India, which is often the most


\(^{40}\) Behrens, 4-5

\(^{41}\) Squassoni, 2
vocal in its criticisms of the NPT.\textsuperscript{42} Moreover, it is repeatedly noted that though the treaty has been in existence for more than 40 years, member states continue to possess nuclear weapons; China and the US have even publicly discussed modernizing their arsenals.

Until India feels satisfied that its concerns about discrimination are heard and the nuclear weapons states begin to make real moves towards fulfilling their Article VI obligations, India will likely refrain from joining the NPT. However, though the NPT states that countries cannot provide nuclear technology to states that are not party to the NPT, the US, in an effort to increase trade and improve bilateral relations with India, has successfully negotiated an exception rule for India, allowing for the sale of US nuclear materials to India.\textsuperscript{43} This exception could prove problematic in the future because states may believe they can just “wait out” the US and eventually avoid following the US lead and still receive the benefits they desire.

Moreover, North Korea was once a member of the NPT. It wanted access to technology that could be used for nuclear energy and in order to acquire those materials and knowledge, it had to join the NPT. However, in 2003, North Korea withdrew from the treaty, citing concerns about “US tyranny” and a need to explore other defense options.\textsuperscript{44} North Korea’s withdrawal shows that countries, even if initially willing to bend to US opinion, will ultimately make security decisions based around perceived defense needs. North Korea continues to acquire


nuclear technologies and trade with a number of countries, despite sanctions.\textsuperscript{45} This also highlights a major flaw in the NPT. States can join and gain access to technology, that could be used to produce a nuclear weapon, and subsequently leave the NPT with no real ramifications.

The US has also not always been seen as a leader when it comes to testing related decisions. In 1963 the US, along with Britain and Russia proposed the Limited Test Ban Treaty, a pre-cursor to the full-on test ban proposed by the CTBT. The LTBT or Partial Test Ban Treaty (PTBT) as it was also known, banned all atmospheric nuclear tests.\textsuperscript{46} This treaty did receive support from a number of nations, but China was a notable outsider to the treaty. Despite pressure from a number of nations, China refused to sign the treaty or even enact a more informal testing moratorium. Between 1993 and 1996, China conducted a number of nuclear tests, which resulted in public outcries about the negative implications of nuclear testing. In response, Chinese officials noted that other states were free to conduct a number of nuclear tests without international criticism and they specifically cited the US, which conducted more than 1000 nuclear tests. In comparison, China conducted 39.\textsuperscript{47}

Though China eventually instituted its own testing moratorium, it is difficult to suggest that it was US leadership that paved the way in this situation. China conducted a number of tests, even after the US brought forward the LTBT and enacted its own atmospheric testing.


moratorium. US action was not modelled until China felt that it had adequately tested its nuclear capabilities. Chinese defense needs came before concerns about international criticism and outrage. The Chinese case also underscores two additional themes seen throughout the paper. First, the claims by other countries that there should be some parity in nuclear testing. The US was able to conduct hundreds of tests. The second is that a testing moratorium may be the long term outcome in places like India or Pakistan but it may be preceded by a number of potentially destabilizing nuclear tests. China only agreed to a testing moratorium after it had conducted a full range of nuclear tests.

The Nuclear Suppliers Group (NSG), unlike the other examples is not a treaty, but is a key export control regime used to support international nuclear non-proliferation efforts. It was established in 1975, likely in response to the 1974 nuclear test conducted by India. The US and other nations were concerned with lax global export controls on materials that could be used to contribute to the development of a nuclear program. The Nuclear Suppliers Group has 46 member states, notably the US, China and Russia. The NSG guidelines have several goals. First to prevent non-nuclear weapons states from diverting peaceful nuclear technologies to a covert weapons program. The second is to highlight and identify a number of commercial goods that could be used in a nuclear weapons program. These goods run the gamut from high strength aluminum to complex machine tools to yellowcake. More recently, the NSG enacted a “catch-all clause” which gives states more flexibility in preventing the shipment of goods that are suspected

---

to be bound for programs of concern. The NSG trigger list also has widespread implications for nuclear non-proliferation. It was used as the basis for UN Security Council sanctions on Iran; the goods that are sanctioned for shipment to Iran in UNSCRs like 1737 are derived almost completely from the NSG trigger list.

Though the NSG is a high priority for the US and has had US backing for decades, save for China, none of the other hold-out states--Egypt, Iran, Israel, India, Indonesia, North Korea, Pakistan--have joined the NSG. The NSG places major limits on trade, which may be seen as a priority for these countries over US interests in nuclear non-proliferation. NSG member states are prohibited from selling goods that could have nuclear applications to states that do not have strong non-proliferation records or IAEA safeguards on their civilian nuclear programs. Even China, an NSG member, does not always adhere to NSG guidelines, and has recently been cited for selling nuclear power plant materials to Pakistan. This case shows that the US continues to have a difficult time getting countries, even allies like Egypt and Israel, to follow through with non-proliferation efforts if it is not in their best interest.

Another example of states ignoring the US lead on a defense related issue is the lack of support for the Chemical Weapons Convention. Egypt, Israel and North Korea have all abstained from joining the CWC which


“requires member states to destroy all chemical weapons stockpiles and dedicated production facilities within a decade of entry into force and to renounce their reacquisition in the future. Functioning both as a disarmament and a non-proliferation measure, it is the first multilateral treaty to require the elimination of an entire category of weapons under strict international monitoring.” 52

Though the US had a moratorium on the use of chemical weapons in combat, like its concerns with CTBT ratification, it was wary of codifying this moratorium and limiting its future defensive options. 53 Indeed, the US waited several years before ratifying, to confirm that other states would also be willing to commit to a ban on the use of chemical weapons. It signed on to the treaty in 1993 but did not ratify until 1997. Though a number of states have committed to the CWC, Egypt, Israel and North Korea stand firmly against this treaty. The Middle East, in particular, will likely remain a thorn in the CWC’s side. States like Israel and Egypt remain concerned about each other’s alleged chemical weapons stockpiles. 54 US action is unlikely to sway these states, unless the US can act as some sort of mediator to convince both Egypt and Israel to verifiably abandon their stockpiles. Moreover, though states such as Iran have signed on to the CWC, it has repeatedly violated its obligations to move away from the use of chemical weapons. 55 Longstanding defense concerns, like those in the Middle East, are likely to trump any


US action on defense related policies. These countries have security issues that tend to outweigh the opinion of the international community.

**US not key to treaty success**

Though US support can be useful for defense-related agreements, treaties that lack US backing are not necessarily doomed. International regimes have survived and even thrived absent US participation. The success of these types of international efforts, despite a lack of US support, indicate that the US may not be critical to winning widespread global support for a norm. Though this paper recognizes that the US is *a* world leader, these examples suggest that the US is not *the* world leader in defense related efforts. International efforts can and do succeed, even when facing criticism from the US.

In 1997, when the Ottawa Treaty, also known as the Mine Ban Treaty, opened for signatures, it was ratified by 122 nations, a number of which actually produced or possessed landmines. Unlike the signatories for the CTBT, many of which did not have nuclear programs or nuclear aspirations, signatories to the Ottawa Treaty were actually giving up weapons that were actively used in their defense strategies. The Ottawa Treaty bans the production and development of all anti-personnel mines and calls upon ratifying parties to completely destroy all anti-personnel landmines within four years of ratification. It also requires states to clear all areas laden with anti-personnel mines within ten years.\(^56\)

Two years after the treaty was opened for signature it entered into force, one of the fastest treaties of this type to do so. To date, 86 countries have destroyed their landmine stockpiles. 44 million mines have been destroyed in the last decade and the treaty has helped decrease the sale

---

and use of landmines in conflict. Indeed, it has been suggested that the Ottawa Treaty led to an international norm against the use of landmines—all without US support.\textsuperscript{57} Even under the new Obama administration there are no plans to join the Ottawa Treaty. Comments as recent as fall 2009 indicate that the new administration still consider landmines to be key to US warfighting strategy.\textsuperscript{58,59} The success of this treaty absent US backing provides evidence that the US is not key to a successful defense-related treaty.

The US did not join the International Criminal Court (ICC), another international institution that has flourished despite US absence. The Rome Statute of the International Criminal Court, the treaty that established the parameters for the ICC, received 60 signatures in 2002, setting up the court. Though President Clinton signed the Rome Statute, he did not seek Senate ratification of the treaty and publically expressed many concerns about the treaty and its possible negative impact on US soldiers. The US also expressed reservations about the treaty because of fears of the ICC encroaching upon US sovereignty and targeting US troops for wartime activities—concerns that conceivably apply to all nations joining the ICC. And yet other nations were still willing to join together to prosecute global crimes in this venue.\textsuperscript{60}

\begin{itemize}
\end{itemize}
During the Bush administration, lack of support for the ICC was confirmed when Bush requested the retraction of the US signature to the Rome Statute. To further underscore that this commitment to oppose the ICC, the Bush administration passed the American Servicemen’s Protection Act (APSA) which limits US aid and support to countries that are party to the ICC. The US actually set up a disincentive to ICC ratification for the global community—and yet the ICC continues to garner support from new countries.  

61 As recently as 12 October 2010 Moldova joined the ICC.

The ICC is able to successfully prosecute international criminals and gain support, even without US membership. A strong commitment by other nations to an important international norm can lead to success, even without backing from the US. These examples may suggest that scholars are not considering the clout of other nations when looking at treaties like the CTBT. Emphasizing the US as the only major player in these types of negotiations can be to the detriment of a treaty because it may suggest to countries that are hesitant to ratify that they should look only to the US, when it appears that other countries can be successful in leading the charge for a global norm. This paper emphasizes that the US is not the only voice that can engender success. Indeed even with the CTBT, recent statements suggest that the US is not the


25
only critical country. In recent talks between India and Japan, the Japanese prime minister noted that there are three countries that need to ratify the CTBT—India, Pakistan and China.  

**How states may make nuclear decisions**

Though a number of states signed onto the CTBT when it first opened for signatures in fall of 1996, ratification by the 44 key Annex 2 states is spread out over a number of years. Some states ratified relatively soon (within 2 years) after their initial signature while some states took close to 10 years to ratify. This time lapse in ratification suggests that states are not waiting for a major power to make decisions, but are focused on their own internal concerns. Ratification for the Annex 2 states did not occur on any major anniversary for the treaty nor did a number of states choose to ratify at the same time as a show of solidarity and support for the treaty. Decisions to ratify appeared to trickle in, at the discretion of each ratifying state. While major powers and their opinions were likely key to the initial push for the treaty and norms against testing, the ultimate decision to ratify seems to be determined at the state level.

In his 1996 article “Why do States Build Nuclear Weapons,” Scott Sagan laid out a number of reasons that suggest why states pursue a nuclear program. The factors discussed below do not explain all states and their considerations regarding nuclear ambitions but do provide some explanations about the importance that states place on nuclear weapons. These reasons, prestige, security and in some cases domestic politics, can also provide an explanation.

---


as to why states will be likely hesitant to give up opportunities to further develop nuclear technology, like ratifying the CTBT.

Security can be a major factor in weapons development. Though this model would suggest that all states would feel the need to develop nuclear weapons, for some security can be achieved through alliances and the provision of a nuclear umbrella from a nuclear power as a form of deterrence. Nuclear weapons, as suggested by concerns about weapons development leading to a proliferation domino, can actually increase security concerns for some, so if the nuclear umbrella is determined to be an effective deterrent, nuclear weapons may not be deemed necessary by that state. However, not all states feel security relying on other nations to provide for their security. China developed nuclear weapons as a way to ensure its continued security. Perceived external threats to national security interests and a belief that only a domestic deterrent would be adequate to combat these threats informed this decision. Security may also prevent states from ratifying the CTBT—if all states do not ratify in a similar timeframe, Israel, for example, may still feel that there is a threat from Iran and wish to keep its testing options available.

But security is not the only factor when it comes to pursuing a nuclear option. Internal politics can also be important when countries consider going nuclear. Sagan notes that India is a prime example of this model. Though many claim that India’s program was in response to China’s nuclear developments, India’s program did not get off the ground for close to ten years after Chinese nuclear tests. If India was so concerned with a threat from China, why did they not develop a crash program in response to this “threat.” Instead, it seems more likely that internal

66 Sagan, 57-62
politics influenced the decision made by India. Heavy lobbying by members of the scientific
community and low popularity ratings for Indira Ghandi, combined with large scale domestic
support for a nuclear weapon were a recipe for a nuclear program. The government realized they
could win over key party members, as well as improve domestic popularity ratings by pursuing a
nuclear program. It seems likely that this model would also hold true for other nuclear related
decisions, including efforts like CTBT ratification. If important leaders in the political
community and a large percentage of the population support ratification, it is more likely to pass.
However, if these groups are opposed to ratification, and especially if leadership has to deal with
low popularity ratings or an upcoming election, even with US ratification, these countries are
probably unlikely to follow US lead to protect their positions of power.

Nuclear weapons can also serve a symbolic function. Prior to the NPT nuclear weapons
were associated with international prestige. States that could successfully build a nuclear weapon
were thought to have both technological and military prowess. Though after the NPT was
established there was a stigma associated with nuclear weapons development, states may still
believe that there is some element of prestige associated with nuclear weapons. And those states
may not be incorrect. Countries like Iran and North Korea, though the subjects of international
ire, have launched themselves onto the international stage, partly because of their pursuit of
nuclear weapons. Though the fame has negative connotations, these countries are in the limelight
nonetheless.

---

67 Sagan 65-69
68 Sagan 71
69 Sagan 76-78
Policy Considerations

There is much debate about the impact that CTBT ratification will have on the US nuclear weapons complex. This paper highlights the fact that other nations are likely putting their own defense needs before worrying about the possibility of international ire due to their actions or lack of support for efforts like the CTBT. Though the US has not tested nuclear weapons in a number of years, the option remained on the table. It is difficult to predict what threats may lie ahead for the United States. Moreover, as new states continue efforts to enter into the nuclear club, there may be questions about the enduring deterrent capability of the US arsenal. These weapons have been untested for decades and when compared with new systems being developed may not pass muster. Though it seems unlikely that US weapons will fail due to rigorous computer simulations and stockpile verification through the Life Extension Program (LEP) and the Stockpile Stewardship Program (SSP), they may not be as capable as they once were.\textsuperscript{70}

However, a number of scientists associated with the US nuclear weapons complex suggest that additional testing is unnecessary, even if the US chose to re-start its Reliable Replacement Warhead (RRW) program or pursue other efforts aimed at stockpile modernization.\textsuperscript{71} So removing the option to test nuclear weapons may have limited impact on future US defense concerns. This paper does not aim to answer the questions of whether or not testing is necessary but does recognize that CTBT ratification should be looked at related to domestic concerns as well as international impact.


\textsuperscript{71} ibid
Even without coming into force the CTBT would likely have a considerable impact on nuclear non-proliferation efforts. Codifying a ban on nuclear testing can only strengthen current moratoriums on nuclear testing and serve to re-enforce the idea that pursuit of nuclear weapons is unpopular with the international community. Moreover, without testing, a state is unlikely to have a credible nuclear deterrent, which could help dissuade states from going down that path, if they are party to the CTBT. The CTBT also may decrease states’ abilities to modernize their arsenals. Though some modifications may be feasible without testing, to successfully miniaturize nuclear warheads would be difficult without conducting nuclear tests. Supporting the CTBT could also have larger implications for other nuclear non-proliferation efforts, like the NPT. India and other hold-out states are quick to criticize the US and other NPT member states that they are not meeting their NPT obligations, especially moving towards a state of disarmament.

Conclusion

The evidence presented in this paper overwhelmingly suggests that US ratification is not key to nuclear decisions made by the other Annex 2 states, even though a wealth of public statements by political officials and political scientists for years has suggested otherwise. The question that remains is why? It is unlikely to suggest that these leaders are not aware of other defense related treaties or past US failures at encouraging action by other states on non-proliferation issues. More likely is that these individuals are continuing to hope for change. The 2009 statement issued by President Obama in Prague outlining his nuclear strategy provides evidence for this idea. World leaders and those that hope for a world that can get down to zero nuclear weapons are likely disinclined to write that there is no hope for CTBT entry into force. The US is a leader in non-proliferation efforts, so it may be that these authors hope that this
leadership can be translated into global CTBT ratification. This paper aims to provide a counter view to this optimism. It is important to have a full understanding of a problem and all of the possible outcomes.

It seems unlikely that other states will model US action, solely because the US has committed to the CTBT. Other defense treaties suggest that US action is not essential to ratification by other states. Evidence suggests that the remaining Annex 2 states will make decisions based on other factors, for example domestic politics or based on their own defense-needs. India, Pakistan, Iran, North Korea and Israel have all made nuclear decisions that were at odds with prevailing international opinion on nuclear issues and the CTBT is unlikely to be an exception to this established pattern of behavior.

Though this case study specifically looks at the CTBT, the methodology used here can also be applied to any number of similar cases in the future. The US is thought to be a global leader in a number of different defense related efforts, including the hotly debated efforts to strengthen controls on fissile material. Again, many of the same arguments are made in support of US action in that case, focusing on the US as a global non-proliferation leader. Using the methodology employed here, additional rigor can be brought to analyzing that case and future defense treaty related issues that may arise, as a way to possibly predict the impact, or lack thereof, that US ratification may have on other nations. It appears that in the case of the CTBT, though US action will be a positive step in support of nuclear non-proliferation, it will likely have limited utility in pursuit of entry into force for the CTBT, as Annex 2 states are unlikely to model US defense decisions.
Bibliography


