



GUIDE TO THE STUDY OF INTELLIGENCE

Counterproliferation

by Rowena Rege Fischer

Counterproliferation is a nebulous term. Simplistically, it is that which is done to counter proliferation. According to the Oxford Dictionary, counterproliferation is defined as an “action intended to prevent an increase or spread in the possession of nuclear weapons.”¹ But, is it limited to nuclear weapons? What about biological or chemical weapons? According to the National Counterproliferation Center, counterproliferation seeks to “eliminate or reduce the threats caused by the development and spread of WMD.”² The CIA, FBI and the Immigration and Customs Enforcement (ICE) agency within the Department of Homeland Security all include weapons of mass destruction (WMDs) technology under counterproliferation.³ This article on countering the spread of WMDs focuses on nuclear weapons as the example.

Why does one seek to counter the proliferation of WMDs? The international community seeks to categorize the use of WMDs⁴ as *jus cogens* – i.e., the acts are so against the fundamental values of the international community that they cannot be tolerated and may not be disregarded.^{5,6} Flowing from this is an obligation to

1. http://www.oxforddictionaries.com/us/definition/american_english/counterproliferation.

2. <http://www.counterwmd.gov/>.

3. See <https://www.cia.gov/news-information/press-releases-statements/press-release-2010/cia-launches-new-counterproliferation-center.html>, <http://www.fbi.gov/about-us/nsb/fbi-counterproliferation-center>, and <http://www.ice.gov/counter-proliferation-investigations/> discussing how each agency views counterproliferation. It is interesting to note that FBI and ICE definition also includes non-WMD technology under counterproliferation.

4. The term Weapons of Mass Destruction (WMD) is often used to reference nuclear weapons, but chemical and biological weapons all fall within this definition. This article focuses on nuclear weapons, but the reader should understand that similar principles apply to chemical and biological weapons.

5. http://www.law.cornell.edu/wex/jus_cogens.

6. International Court of Justice summary of the Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in

prevent additional nations from obtaining WMDs.⁷ As countries historically developed their WMD programs indigenously⁸ or acquired the WMD as whole part(s), the international community historically focused on promoting dismantling of these programs by restricting the use and stockpiling of WMDs.⁹ An example of this was when the Soviet Union dissolved, a large concern was that whole nuclear weapons would be

Armed Conflict (“the threat or use of nuclear weapons would generally be contrary to the...principles and rules of humanitarian law” (<http://www.icj-cij.org/docket/files/95/7497.pdf>).

7. See United Nations Security Council Resolution (UNSCR) 1540, which states that the proliferation of WMDs and their means of delivery are a threat to international peace and security. UNSCR 1540 also obligates the States to implement procedures to prevent such proliferation, and cooperate with other States to accomplish the goal of preventing proliferation. (<http://www.un.org/en/sc/1540/>).

8. Although the United States mostly developed its nuclear weapons program during World War II indigenously, many of the scientists were brought to the United States from Europe, including Germany. For example, Enrico Fermi. (http://www.atomicheritage.org/mediawiki/index.php/Enrico_Fermi); Emilio Segre (http://www.atomicheritage.org/mediawiki/index.php/Emilio_Segre); Hans Bethe (http://www.atomicheritage.org/mediawiki/index.php/Hans_Bethe) and Niels Bohr (http://www.atomicheritage.org/mediawiki/index.php/Niels_Bohr).

9. See for example the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare (aka, the 1925 Geneva Protocol) which prohibited the use of chemical and biological weapons in international armed conflicts (<http://www.un.org/disarmament/WMD/Bio/1925GenevaProtocol.shtml>); the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (aka, Biological Weapons Convention), opened for signature in 1972 (<http://www.un.org/disarmament/WMD/Bio/>); the Hague Convention of 1899, a multilateral treaty which inter alia prevented the signatories from discharging projectiles “the sole object of which is the diffusion of asphyxiating or deleterious gases” in a war between signatory States (http://en.wikipedia.org/wiki/Hague_Convention_of_1899); the Convention on the Prohibition of the Development, Production, Stockpiling of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (aka, Chemical Weapons Convention), adopted in 1992 (<http://www.opcw.org/chemical-weapons-convention/>); the Convention on the Physical Protection of Nuclear Material, adopted in 1979, renamed in 2005 the Convention on the Physical Protection of Nuclear Materials and Nuclear Facilities, mandates that the signatory States protect domestic nuclear facilities and material, provides for expanded cooperation between the States related to smuggled nuclear material and mitigation of radiological consequences due to sabotage (<http://www.iaea.org/Publications/Documents/Conventions/cppnm.html>); and the Treaty on the Non-Proliferation of Nuclear Weapons (aka Non-Proliferation Treaty (NPT), opened for signature in 1968, which seeks to prevent the spread of nuclear weapons and technology, promotes cooperation in peaceful uses of nuclear energy and seeks disarmament (<http://www.un.org/disarmament/WMD/Nuclear/NPT.shtml>). As of 2013, 190 countries have joined the treaty. North Korea withdrew from the NPT. India, Israel, Pakistan and South Sudan never joined. http://en.wikipedia.org/wiki/Treaty_on_the_Non-Proliferation_of_Nuclear_Weapons.

acquired by other countries seeking such weapons. But, as the world has gotten more global and parts are manufactured in multiple countries and then shipped to yet other countries for assembly for use in a totally different country, rogue nations desiring illicit WMD programs have been able to capitalize on this global market in order to develop these programs. So, now, the proliferation concern to be countered is not only the suitcase containing the whole nuclear weapon being shipped to the neighboring country,¹⁰ but also the multiple parts being shipped from multiple nations that can later be assembled to make the whole nuclear weapon.

But, how does one obtain these parts? Does one go to the local grocery store or the local shopping mall? Almost, apparently. In January 2004, the then-Director General of the International Atomic Energy Agency (IAEA) stated that shopping for nuclear weapons in the international black market was as easy as going to Wal-Mart.¹¹ The man credited as being the father of this global network of nuclear weapons parts is A.Q. Khan. To understand how this global market developed and how to counter the threat of this global illicit market, one must first learn about Khan's history.

Khan was a Pakistani scientist who studied metallurgy in The Netherlands and then worked in Europe where he gained further knowledge of civilian nuclear uranium enrichment process,¹² and where his employer permitted him more access than he was authorized and vetted for.¹³ His employer also had lax security rules,¹⁴ which Khan exploited. None of this would have been an international concern if not for Khan's desire to help his country, Pakistan, develop

a nuclear weapon. Unbeknownst to his employer, Khan had offered his services to then Prime Minister of Pakistan, Zulfikar Bhutto,¹⁵ which was apparently accepted. In hindsight, it appears that Khan exploited his job, the lax security measures of his employer and utilized his and the Government of Pakistan's resources to assist Pakistan's nascent nuclear weapons program.¹⁶ And, then in 1975, Khan returned to Pakistan, where he was legitimately employed in Pakistan's weapons program. He was eventually promoted to Pakistan's Engineering Research Laboratory (ERL), which was later re-named in honor of him. While in Pakistan, he was able to exploit his contacts in Europe by collaborating and consulting with them. In addition to his knowledge and his contacts, Khan's other key take-aways from his work in Europe were the names and contact information for manufacturers and distributors of supplies for nuclear applications.¹⁷ With that knowledge and with the government of Pakistan's shopping list, he was able to advance Pakistan's nuclear weapons program until Pakistan joined the select list of nations with nuclear weapons in 1998. What then for the man who came up with all this? It should not surprise anyone that in addition to his assistance to Pakistan's nuclear weapons program, Khan is also credited with assisting China, North Korea, Libya, and Iran in their nuclear weapons programs over a period of several years.

In utilizing open markets, Khan rarely went to the manufacturer; rather he went through middlemen working through front companies and utilized false end-destinations for the items.¹⁸ In this respect, Pakistan, using Khan, was the first to country to use open markets, albeit covertly and using subterfuge, to develop its nuclear weapons program. Historically, countries had utilized indigenous development, acquisition of scientists, acquisition from another country, diversion from a civilian nuclear program, and espionage.¹⁹ By changing tactics Khan made it easier to acquire the technology and simultaneously made countering proliferation more difficult because he made it harder to identify. If all that a nation or a terrorist needs to acquire a WMD is to acquire the parts

10. The transport of the suitcase containing the nuclear weapon is also a counterterrorism concern. Counterproliferation looks to understand how nations and international terrorists are developing indigenous WMD programs and the status of each.

11. David E. Sanger, "The Struggle for Iraq: Weapons Inspectors," *New York Times*, A12, column 4, (January 24, 2004).

12. "Any state with enrichment facilities [to produce enriched uranium] or reprocessing facilities would therefore already be skilled in ... the most difficult part of building a nuclear weapon: obtaining the necessary fissile material." <http://www.wired.com/dangerroom/2007/12/a-week-after-it/>.

13. Although not possessing the appropriate security clearances, Khan was asked by the Anglo-Dutch company, URENCO, to translate secret centrifuge plans. See "The Wrath of Khan," by William Langewiesche, *The Atlantic*, November 2005. <http://www.theatlantic.com/magazine/archive/2005/11/the-wrath-of-khan/304333/>.

14. He was known to take classified documents home; he would walk through the buildings in URENCO taking notes in his native Urdu which he would claim were letters to his family; and he would take readily available, but discarded, centrifuge prototype parts home. See Id.

15. Id.

16. Id.

17. Id.

18. "The Point of No Return" by William Langewiesche, *The Atlantic*, January 2006. <http://www.theatlantic.com/magazine/archive/2006/01/the-point-of-no-return/304500/>.

19. <http://www.iiss.org/en/publications/strategic%20dossiers/issues/nuclear-black-markets—pakistan—a-q—khan-and-the-rise-of-proliferation-networks—a-net-assessment-23e1/nbm-chapter-02-5303>.

and put them together, and if the intelligence services of the licit countries cannot identify the purchasers, the purchases, the middlemen, and the front companies used to acquire the parts for these illicit WMD programs, the risk of getting caught is dramatically reduced for the illicit nations.²⁰

Given this global marketplace for nuclear weapon parts and ambitious scientists who could gain tremendous accolades from their home nation,²¹ how do licit countries fulfill their obligations under *jus cogens* to the proliferation of WMDs?

Prosecution is one tool, but that usually occurs after the dirty deed is done – i.e., after the nation has acquired the part or has attempted to acquire the part by taking substantial steps towards the goal thereby paving the way for the next person. Additionally, how does a licit country prosecute someone from a procurement network for a country illicitly seeking WMD technology? Are these procurement agents within the boundaries of the licit country? Prosecutions in absentia are occasionally possible,²² but how much of a deterrent is such a prosecution when the country lacked in *personum* jurisdiction over the defendant? The Department of Justice has a fact sheet of recent federal prosecutions for export violations.²³ Many of these summaries discuss extraditing the defendants from third countries. But, what if that is not successful? How can one have a prosecution if the defendant is savvy and does not travel to a country willing to extradite them,²⁴ and their home country treats them as a

national hero akin to how Pakistan treats A.Q. Khan?

Interdicting the shipment en-route is another tool and the Proliferation Security Initiative (PSI) is an example of a regime designed for this end-goal.²⁵ But this, too, has the flaw of paving the way for the next person. Additionally, how does one know which global shipment to stop? The answer to that is intelligence.²⁶ When there is “solid” intelligence, PSI is a mechanism for sharing it.²⁷ And, PSI has been successful. For example, according to the Department of State, in part due to intelligence, in January 2004, US and British agents seized a German-flagged ship carrying centrifuges and other parts used to create enriched uranium as it traveled from “a Persian Gulf country” to Libya.²⁸ Another example is in June 2011 when US naval forces intercepted a shipment suspected of containing ballistic missile technology from North Korea to Myanmar.²⁹

Part of knowing which shipment to stop, one must know which parts or technology should be restricted from the nations and terrorists seeking illicit WMD programs. The multinational groups and agreements that assist with this discussion are the Nuclear Suppliers Group, the Australia Group, the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention), Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Biological Weapons Convention) and The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies (Wassenaar Arrangement). These multinational agreements are then incorporated into the export laws of the nations, which in turn enables prosecutions of violators.

US export control laws also include economic sanctions, which seek to stem the money flow enabling

20. For example, the United States intelligence community had not detected India's preparation for their 1988 nuclear bomb tests. http://en.wikipedia.org/wiki/Pokhran-II#Movement_and_logistics.

21. See for example, how Pakistan has treated A.Q. Khan. Pakistan renamed their national research institute after him; provided him with a military escort for years when he travelled; he received Pakistan's highest civilian award; although he confessed to proliferating, he was placed under house arrest in one of the largest houses in Pakistan and no one from the international community was allowed to question him. He was later pardoned. http://en.wikipedia.org/wiki/Abdul_Qadeer_Khan#Pardon.2C_IAEA_calls.2C_and_aftermath, <http://www.theatlantic.com/magazine/archive/2005/11/the-wrath-of-khan/304333/>, http://www.theatlantic.com/magazine/archive/2006/01/the-point-of-no-return/304500?single_page=true and <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/06/AR2009020603730.html>.

22. See for example the in absentia trial and sentencing of A.Q. Khan in The Netherlands for attempted espionage. This was overturned later on a legal technicality. http://en.wikipedia.org/wiki/Abdul_Qadeer_Khan#Research_in_Europe.

23. <http://www.justice.gov/nsd/docs/export-case-fact-sheet-201311.pdf>. DOJ Fact Sheet.

24. An example of which is Milad Jafari, who was indicted in 2010 on multiple export violations but is not listed as having been sentenced. See DOJ Fact Sheet and http://www.isisnucleariran.org/assets/pdf/afari_10Feb2011.pdf.

25. According to the Department of State, PSI seeks to stem the proliferation of WMDs inter alia by “interdicting the transfer or transport of WMD, their delivery systems and related materials to and from states and non-state actors of proliferation concern;” and improve procedures for exchange of information [i.e., intelligence] relevant to proliferation activity. <http://www.state.gov/t/isn/c27726.htm>.

26. <http://2001-2009.state.gov/t/isn/rls/fs/46839.htm>.

27. Ibid.

28. <http://www.dw.de/german-ship-seized-with-uranium-making-parts-for-libya/a-1075724>.

29. <http://www.armscontrol.org/factsheets/PSI>.

the illicit purchases.³⁰ The Non-Proliferation Sanctions also block the property of those engaged in proliferation activity. “Blocking” means title is retained by the target, but the target may not exercise ownership rights without permission of the Treasury Department’s Office of Foreign Assets Control (OFAC).³¹ In other words, the owner may not sell or otherwise trade the item or transfer blocked funds from bank accounts.³² Additionally, banks have paid record fines for violating these laws.³³

Most of the discussion thus far has been on the proliferation of parts and pieces of the WMD. What about the whole WMD? What is in place to prevent the transport of, say, the whole nuclear weapon to an illicit country or terrorist group? This can be accomplished by reducing the number of WMDs available for transport or by enhancing the protection of the WMDs. Many of the multinational agreements and treaties were discussed earlier in this paper. The United States also has programs designed to prevent the illicit transfer of the whole WMD. The Department of Defense’ Defense Threat Reduction Agency (DTRA) is responsible under the Nunn-Lugar Cooperative Threat Reduction Program for working with other nations and international organizations to secure and dismantle WMDs and related infrastructure from the former Soviet Union states.³⁴ According to DTRA “the program has deactivated more than 7,500 nuclear warheads, neutralized chemical weapons, safeguarded [nuclear material], converted weapons facilities for peaceful use, mitigated bio-threats, and redirected the work of former weapons scientists and engineers.”³⁵

How does the world know which countries have illicit WMDs and which ones do not? International organizations such as the International Atomic

Energy Agency (IAEA) and the Organization for the Prohibition of Chemical Weapons (OPCW)³⁶ monitor the WMD programs per country. IAEA inspectors visit the sites of suspected illicit nuclear weapons. Of course, this requires the cooperation of the country developing the illicit nuclear weapon. Iraq’s success in the 1990s in hiding its illicit development of nuclear weapons program is outlined in the book by Dr. Mahdi Obeidi, the scientist in charge of developing the program.³⁷ Iran recently agreed to giving IAEA inspectors greater access to its nuclear facilities.³⁸

But, how do these international organizations know which countries are attempting to build illicit WMD programs and where? The information can come from the countries trying to prevent the illicit proliferation of WMDs, as Colin Powell noted in 2003 during his speech to the United Nations regarding Iraq’s WMD program.³⁹ During this speech, he said that the United States had intelligence based on technical sources such as intercepted telephone calls and human sources who “risked their lives” to provide this information.⁴⁰ But, the intelligence community must be careful about knowing the reliability of each piece of intelligence. For example, years after his speech to the United Nations, it came out that much of the most critical intelligence he referenced was based on one human source, Curveball, who was believed to be unreliable and who later admitted to lying about Iraq’s WMDs.⁴¹ The intelligence can also come from the inspections done by the international organizations.⁴²

As one can see, the systems in place for countering the proliferation of WMDs are complicated. Is there a sheriff in charge? For the United States, the answer is “somewhat.” The National Counterproliferation Center (NCPC) within the Office of the Director of National Intelligence aids the United States in countering the worldwide WMD threat.⁴³ NCPC develops strategies to counter the proliferation of WMD, works with policymakers within and outside

30. <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>.

31. <http://www.treasury.gov/resource-center/faqs/Sanctions/Pages/answer.aspx>.

32. <http://www.treasury.gov/resource-center/faqs/Sanctions/Pages/answer.aspx>.

33. See <http://online.wsj.com/news/articles/SB10001424052702303901504577462512713336378>, which discusses ING Bank’s record \$619 million fine in 2013. The article also discusses the previous record fines paid by Switzerland’s Credit Suisse Group AG and the UK’s Lloyds Banking Group PLC. See also <http://online.wsj.com/article/SB123067596166888285.html>, a 2009 article which discusses how even the New York County District Attorney was looking into illegal transactions by ten banks.

34. http://en.wikipedia.org/wiki/Nunn-Lugar_Cooperative_Threat_Reduction and <http://www.dtra.mil/Missions/nunn-lugar/nunn-lugar-home.aspx>.

35. <http://www.dtra.mil/Missions/Nunn-Lugar/GlobalCooperationInitiative.aspx>.

36. <http://www.opcw.org/our-work/non-proliferation/>.

37. *The Bomb in My Garden: The Secrets of Saddam’s Nuclear Mastermind*, by Mahdi Obeidi, John Wiley & Sons, 2005.

38. http://www.washingtonpost.com/world/middle_east/irans-signs-agreement-with-iaea-to-allow-broader-inspections-of-nuclear-sites/2013/11/11/fef81002-4ad5-11e3-ac54-aa84301ced81_story.html.

39. <http://www.theguardian.com/world/2003/feb/05/iraq.usa>.

40. Ibid.

41. <http://www.newsmax.com/Headline/colin-powell-iraq-wmd/2011/02/16/id|386373>.

42. *The Bomb in My Garden: The Secrets of Saddam’s Nuclear Mastermind*, by Mahdi Obeidi, John Wiley & Sons, 2005.

43. <http://www.dni.gov/index.php/about/organization/national-counterproliferation-center-who-we-are>.

of government, and seeks to eliminate intelligence gaps relating to the proliferation of WMDs.⁴⁴ NCPC's mission is related to WMD. As noted earlier, although the CIA limits counterproliferation efforts to WMD, the FBI and ICE include the proliferation non-WMD technology also within their definition of counterproliferation.⁴⁵ An interesting dichotomy is with FBI versus ICE. FBI investigates these under its National Security Branch, which is headed by an individual whose appointment and removal requires DNI concurrence.⁴⁶ In other words, FBI's Counterproliferation Center (CPC) *inter alia* reports to DNI and is within the intelligence community. However, ICE is not a member of the intelligence community⁴⁷ and therefore ICE's Counter-Proliferation Investigative Unit does not report to DNI. Although NCPC lists the Department of Homeland Security (DHS)⁴⁸ as a partner, it is unclear which sections of DHS are at NCPC.⁴⁹

Conclusion

In this game of cat-and-mouse, nations covertly seek WMD programs while the international community seeks to counter their efforts. The international community works through the United Nations, and through multilateral agreements and partnerships. Additionally, individual licit countries work through their laws and policies to aid in these efforts. This results in a multi-level domestic and international system to counter proliferation – i.e., acts which are considered *jus cogens*.

READINGS FOR INSTRUCTORS

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Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar, *Deadly Arsenal: Nuclear, Biological, and Chemical Threats*.

44. <http://www.counterwmd.gov/howwedoit.htm>.

45. See footnote 3 *supra*.

46. 50 USC 3041(b)(2)(H) and Executive Order 12333, as amended.

47. See for example Executive Order 12333, as amended, which does not list ICE as a member of theUSIC.

48. The Office of Intelligence and Analysis in DHS is part of theUSIC. EO 12333, as amended.

49. <http://www.counterwmd.gov/partners.htm>.

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Derek Smith, *Deterring America: Rogue States and the Proliferation of Weapons of Mass Destruction*. New York: Cambridge University Press, 2006. ↘

Rowena Rege Fischer, MPH, M.S., J.D. Ms. Fischer earned a B.S. in Microbiology and Molecular Genetics, a Masters in Public Health in Epidemiology, and a M.S. in Chemistry where she designed and built an instrument for near-single-molecule detection. While in law school she authored two legal papers on how export control laws apply to researchers at US universities. After law school, she was a Presidential Management Fellow (PMF) who used her fellowship to gain broad experience in how the US Government administers its export control laws. She currently works as an attorney for the government. The opinions and thoughts expressed in this paper are hers alone and are not endorsed by the US Government.

“It doesn’t matter how smart you are, unless you stop and think.”

— attributed to St. Ambrose and, by some, to Dr. Thomas Sowell



“You didn’t wait six months for a feasibility study to prove that an idea could work. You gambled that it might work.”

You didn’t tie up the organization with red tape designed mostly to cover somebody’s ass. You took the initiative and the responsibility.

You went around end. You went over somebody’s head if you had to.

But you acted. That’s what drove the regular military and the State Department chair-warmers crazy about the OSS.”

— The Hon. William J. Casey, former director, CIA