

Vol.5 • No.1 • Spring & Fall 2013

ISSN. 1307 - 9190



Defence Against Terrorism Review

Miles A. POMPER

Fighting Nuclear Terrorism: Phasing out the
Use of Highly Enriched Uranium in the Civil Sector

Dr. Keith SPENCE

National, Homeland and Human Security:
Conceptual Development, Globalization and Risk

Dr. Münevver CEBECİ

The European Union and Weapons of
Mass Destruction Terrorism

Hikmet Sami TÜRK

An Overview of Legal Responses to Terrorism

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Editor's Note

The fight against terrorism would enter a dangerous new phase if terrorist networks use weapons of mass destruction (WMD) in their attacks. This subject has been covered in previous volumes of DATR (see, for instance, the Fall 2009 issue) by world renowned scholars and eminent experts. Moreover, it has been emphasized time and again in our editorial notes that “this subject needs much more elaboration in various platforms and venues in order to effectively deal with the threats ahead”. Hence, the current issue brings together articles covering the various dimensions of the measures that have to be considered in the global fight against terror.

Miles A. Pomper, a prominent expert on nuclear security matters from the Washington D.C., office of the James Martin Center for Nonproliferation underlines, in his article titled “*Fighting Nuclear Terrorism: Phasing out the Use of Highly Enriched Uranium in the Civil Sector*”, the fact that massive amounts of HEU continue to be set aside for nuclear weapons and for powering nuclear vessels such as submarines and aircraft carriers. He argues that a tremendous amount of work remains to be done to minimize and ultimately eliminate the use of HEU in the civilian sector, let alone tackle the broader task of preventing terrorist access to any such material. That said, Pomper notes that fortunately an international consensus has emerged in recent years, highlighting the 2010 and 2012 Nuclear Security Summits. Nevertheless, he further notes that the world still lacks a common and comprehensive strategy to minimize and ultimately eliminate this danger.

Keith Spence, a distinguished scholar in the Centre of International Study at the University of Lincoln, covers the concept of human security in his article titled “*National, Homeland and Human Security: Conceptual Development, Globalization and Risk*”. The concept of human security was established as a practical approach within the United Nations Development Report of 1994. Uncertainties surrounding its development indicate that security itself is a concept in transition and human security does not present itself as a simple alternative to, or replacement for, established models of physical and territorial security. In establishing an agenda for security that exceeds these conventional boundaries it does, however, enable a necessary rethinking of both conceptual limits and practical materializations of security in response to the challenges and possibilities that globalization presents.

Münevver Cebeci, an expert on the European Union from the Marmara University’s EU Institute in Istanbul, discusses in her article “*The European Union and Weapons of Mass Destruction Terrorism*”, the EU’s policy on WMD terrorism and non-proliferation, analyzing their impact on counterterrorism. She argues that the EU’s stance against WMD terrorism remains rather declaratory and limited because of its preference for dealing with this issue mainly through the broader framework of its non-proliferation policy which prioritizes supporting international non-proliferation treaties and regimes. According to Cebeci, there has been a continuous lack of coherence in its non-proliferation policy and that it affects EU’s stance on WMD terrorism. Thus, coherence both at the institutional level and among the policies of member states becomes crucial.

Hikmet Sami Türk, former Minister of Justice, provides valuable insights, both as a scholar as well as a practitioner, about the difficulties in the fight against terrorism by staying on the legal ground. He has given a speech “*An Overview of Legal Responses to Terrorism*” at the opening of the “*Legal Aspects of Terrorism Course*”. In that speech Türk underscores that today terror and terrorism have become the common problem of humanity. He further notes that the issue has always remained on the agenda of international organizations such as the United Nations, NATO, the European Council and the European Union, and that various decisions have been taken by these organizations resulting in many international treaties that aim to prevent terrorism by way of achieving international cooperation. According to Türk, the most important responsibility of a state,

acting within the boundaries of rule of law, is respect for human rights in order to achieve a social order where all citizens can live free from the fear of terror in anyway and look to the future with confidence. Türk's speech carries a long list of references to a wide range of legal documents and thus provides the readers with a very rich source that may be necessary in their research on the subject matter

One should always remember that those who fight against terrorism must prevail in their multifaceted efforts at all times, while it suffices for terrorists to reach their objectives only once. The fight against terrorism has certainly become global and must meet the requirements of the apparent risk of becoming even more fatal with the possibility of the use of WMD material in terror attacks. Security measures, however, must stay within the boundaries of law, in order to observe the rights of the individuals. Hence, cooperation between states in all possible areas and the contribution of international organizations to these efforts will surely amplify the effectiveness, and facilitate the task, of those who fight against terrorist networks.

Mustafa Kibaroglu
Editor-in-Chief



Fighting Nuclear Terrorism: Phasing out the Use of Highly Enriched Uranium in the Civil Sector¹

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Abstract: *The stocks of highly enriched uranium that are available in the world present a threat that could be exploited by terrorists in a nightmare scenario. Although it is unlikely that a nuclear explosion would result, a “dirty bomb” constructed of conventional explosives to spread radioactive material is a very likely scenario. This article explores the issue and examines various programs underway to reduce this threat.*

Keywords: *Highly enriched uranium (HEU), nuclear terrorism, reduction of nuclear material stocks*

Highly enriched uranium (HEU) is one of the most dangerous materials in the world, thanks to the ease with which it can be utilized in a nuclear explosive device. Unlike its cousin plutonium, highly enriched uranium is suitable for use in the simplest kind of nuclear weapon, a so-called ‘gun-type’ bomb. In gun-type devices, one piece of fissile material is fired at another target, which together form a critical mass and spark a chain reaction. The process is so simple and well-understood that such a device need not be explosively tested; even the first such bomb, which was dropped on Hiroshima in 1945, was not tested prior to its use. In addition, HEU’s weak radioactivity makes it relatively easy to handle and

¹ This paper draws from a paper by the author published by the Johns Hopkins School of Advanced International Studies, entitled “The 2012 Nuclear Security Summit and HEU Minimization,” January 2012. The current paper was drafted later in 2012 and figures, tables, and other data in the paper are as of that year unless cited specifically. The author thanks former CNS Research Assistant Meghan Warren for her assistance in producing this paper.

hard to detect.² Terrorists who acquire a sufficient quantity of HEU³ would not require the scientific and financial resources of a state to construct a nuclear device.

To be sure, most experts agree that terrorists are less likely to acquire and use nuclear weapons than conventional explosives, chemical weapons, or far more accessible radiological materials (to make a “dirty bomb” or other radiological weapon). However, there have been nearly 20 cases reported to the International Atomic Energy Agency over the past two decades which have involved seizures of trafficked HEU.⁴ Moreover, the sheer magnitude of a potential nuclear attack – in lives, money, and damage to global security – requires that NATO take seriously efforts to curb the use of highly enriched uranium in the civilian sector. Unlike military HEU, civilian HEU is not consistently afforded a maximum level of physical protection. More importantly, though, HEU is not even necessary for most civilian applications. Thus, the ongoing use of HEU poses a needless threat to international security, but with sufficient political will and technical know-how, there is little reason for its use to continue and for the threat to persist.

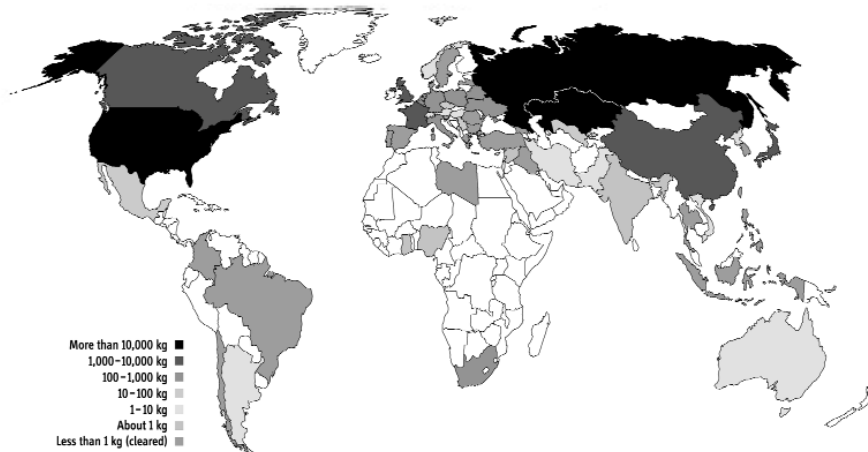
HEU differs from natural uranium or low enriched uranium (LEU) used in nuclear power reactors in the degree of concentration of the Uranium-235 (U-235) isotope relative to other uranium isotopes. Natural uranium includes less than one percent U-235, while LEU contains less than 20% U-235, and HEU contains more than 20% U-235. The higher the enrichment level of the HEU, the less required for a nuclear weapon, with concentrations of 80% or more traditionally used in state nuclear weapons programs. Various industrial techniques are employed to separate and concentrate the U-235 found in natural uranium to higher enrichment levels.

Massive amounts of HEU continue to be set aside for nuclear weapons and for powering nuclear vessels such as submarines and aircraft carriers. The primary civilian use of HEU has been in research reactors and other test facilities, where it has been employed because it generates a high flow of U-235 neutrons (neutron flux), useful for research and a number of specialized tasks. It has also been used in the process of producing medical isotopes, which are used for procedures such as diagnosing cancer and heart disease, and in civilian propulsion reactors, which generate power for some ships such as nuclear-powered submarines and Russian icebreakers. A half century ago, the Soviet Union and the United States started shipping HEU abroad as part of their peaceful nuclear cooperation programs (“Atoms for Peace” in the U.S. case) and the material ended up scattered widely around the globe (see Figure 1). But by the late 1970’s, India’s ‘peaceful nuclear explosion’ and the rise of international terrorism had convinced the two superpowers to launch efforts to phase out research reactor use of HEU (particularly overseas) and replace it with LEU. These efforts were accelerated following the September 2001 terrorist attacks in the United States and have made significant gains.

² Pablo Adelfang, “Non-Proliferation and the Reduction of Commercial Traffic in HEU” (Symposium on Progress, Challenges, and Opportunities for Converting U.S. and Russian Research Reactors from Highly Enriched to Low Enriched Uranium Fuel, Moscow, 8 - 10 June 2011).

³ The International Atomic Energy Agency says that 25 kg of U-235 in HEU is sufficient for one nuclear weapon, although experts say that states could construct one with less material. The IAEA, on the other hand, estimates that terrorists would probably need about 50 kg of HEU to build a simple nuclear device, allowing for some experimentation, material loss, and other.

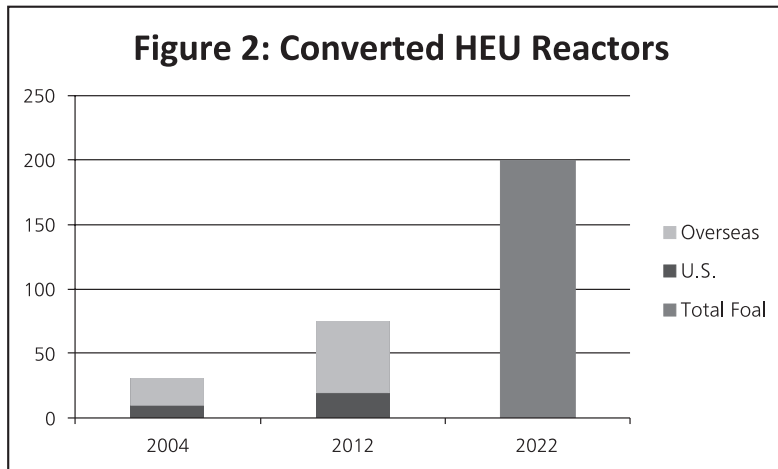
⁴ International Atomic Energy Agency, “IAEA Illicit Trafficking Database (ITDB): 2013 Fact Sheet,” available at <http://www-ns.iaea.org/downloads/security/itdb-fact-sheet.pdf> (last visited Nov. 3, 2013).

Figure 1: Global HEU Stocks

Source: Global Fissile Material Report 2010: Balancing the Books, Fifth Annual Report, International Panel on Fissile Materials.

Nonetheless, a tremendous amount of work remains to be done to minimize and ultimately eliminate the use of HEU in the civilian sector, let alone tackle the broader task of preventing terrorist access to any such material. The U.S. Department of Energy’s National Nuclear Security Administration (NNSA), which leads U.S. HEU minimization efforts, assesses that after decades of efforts by the United States and Russia only one-third of the research facilities worldwide that use HEU have been converted to using LEU or shut down. NNSA estimates that at a minimum it will take more than another decade for these reactors to be entirely weaned off of HEU (see Figure 2 below). Moreover, the civilian facilities that use the most HEU have not been converted, with nine reactors in the United States and Europe alone consuming nearly 400 kg of HEU annually.⁵ As much as 70 tons of HEU are said to remain in the civilian sector, enough perhaps for several thousand nuclear weapons.

⁵ See Alan J. Kuperman, “Can RERTR Be Expanded to a Global HEU Phase-Out?” (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 25, 2011). The nine reactors are the U.S. ATR, HFIR, MURR, NBSR, and MIT reactors, as well as the HFR, FRM-2, BR—2, and Orphee reactors in Western Europe.



Source: Jordi Roglans-Ribas, Argonne National Laboratory.

Fortunately, an international consensus has emerged in recent years - as demonstrated in international forums such as nuclear Nonproliferation Treaty Review Conferences and UN Security Council Resolution 1887 – that, given the security risks, the use of HEU outside military technologies should be minimized to the extent that it is technically and economically feasible. Also, at the 2010 and 2012 Nuclear Security Summits, the 50-odd participating countries endorsed this consensus and several countries took individual steps to minimize or eliminate civilian HEU.

Nonetheless, the world still lacks a common and comprehensive strategy to minimize and ultimately eliminate this danger. The United States, France, South Korea, and industry leaders sought to use the 2012 Seoul Nuclear Security Summit to accelerate efforts to minimize HEU in the civilian sector and made some incremental progress. Unfortunately, however, few other countries share those leaders' perceptions of the urgency of the potential terrorist threat and key countries inside and outside the summit - Russia, South Africa, and Belarus - have blocked more sweeping gains.

Background – Reducing research reactor use of HEU

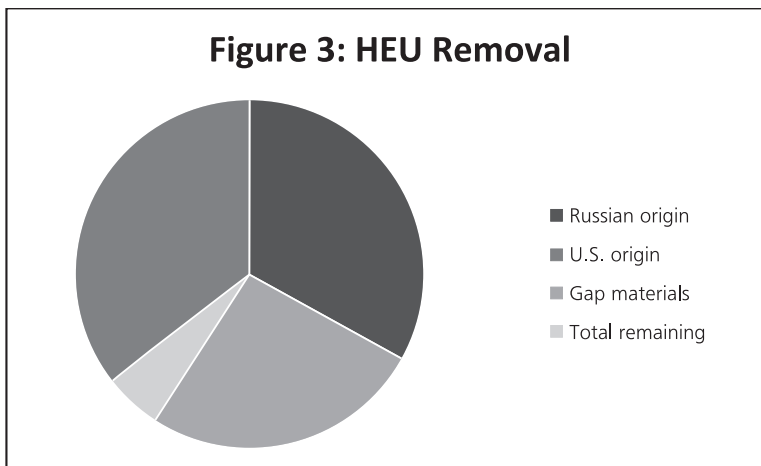
In the late 1970s and early 1980s, the United States and the Soviet Union launched programs to eliminate weapons-grade HEU use in research reactors abroad. In the United States, the effort fell under the Reduced Enrichment for Research and Test Reactors (RERTR) program, which had spearheaded the conversion of 76 reactors to LEU by late 2011.⁶ The Soviet/Russian programs did not necessarily shift to material that was low enriched uranium, i.e. where less than 20% of the uranium is the fissile isotope U-235. However, the enrichment level was sufficiently low (in the Soviet case 36% U-235) that it would be more difficult to build a workable device given the relatively large total amount of uranium required to have a sufficient quantity of U-235.

⁶ Andrew Bieniawski, "Global Threat Reduction Initiative and International HEU Minimization," (33rd International Meeting on Research and Test Reactors, (RERTR), Santiago, Chile, October 25, 2011).

The September 2001 terrorist attacks reinvigorated concerns of nuclear terrorism and fears that terrorists might gain access to civilian HEU. The Bush administration launched the Global Threat Reduction Initiative in 2004, which grouped together RERTR with several other related initiatives and received substantially increased funding from Congress.

U.S. efforts have been supported by an important policy lever: the Schumer Amendment to the Energy Policy Act of 1992, a U.S. law which allows the issuance of an export license for HEU for use in research or test reactors only under certain conditions: if there is no fuel or target of low-enriched uranium that could be used in the importing reactor, if the recipient commits to use a low-enriched substitute when it becomes available, and if the United States is actively developing alternative fuels or targets for the reactor.⁷ As a result, from 1993 to 1999 there were “virtually no exports” of HEU,⁸ compared to the nearly three tons exported by the United States annually in the late 1960s.⁹

The Bush administration also fostered bilateral cooperation with Russia. In 2005, Presidents George W. Bush and Vladimir Putin agreed that their countries would cooperate in research reactor conversion, by providing LEU for any U.S. or Russian designed research reactors operating with HEU. Spent HEU fuel is then returned to the country of origin.¹⁰ In practice, this has largely meant that NNSA has paid Russia to help ship back HEU to Russia from countries such as Belarus, Poland, Serbia, and Ukraine. This effort has yielded clear progress (see Figure 3): nearly all of the U.S. HEU abroad has been returned and much of the Soviet fuel has been returned to Russia.



Source: National Nuclear Security Administration.

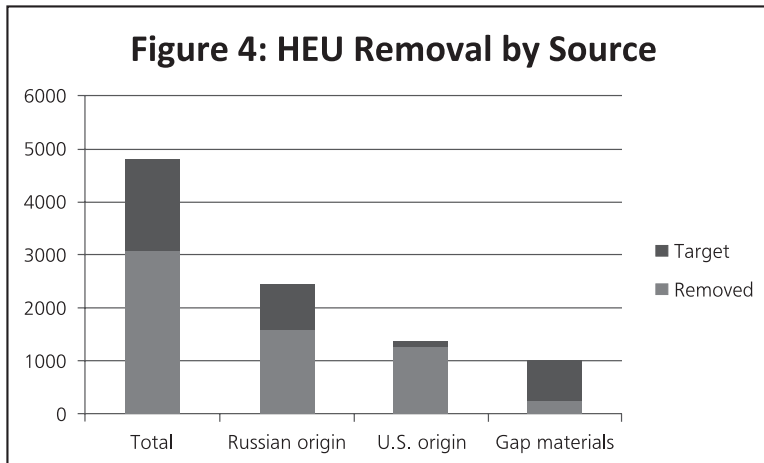
⁷ 1992 Energy Policy Act, H.R. 776 ENR, Sec. 903.

⁸ Alan J. Kuperman, “Civilian Highly Enriched Uranium and the Fissile Material Convention,” in *Nuclear Power and the Spread of Nuclear Weapons* (Sharon Tanzer, Steven Dolley and Paul Leventhal, eds., Potomac Books, 2002), p. 251.

⁹ Alan J. Kuperman, “Bomb-Grade Bazaar,” *Bulletin of the Atomic Scientists* (March/April 2006), at available at http://faculty.maxwell.syr.edu/rdenever/NatlSecurity2008_docs/Kuperman_BombGradeBazaar.pdf (last visited Nov. 3, 2013).

¹⁰ National Nuclear Security Administration, “Presidential Initiatives,” at <http://nnsa.energy.gov/aboutus/ourprograms/nonproliferation/counteringnuclearterrorismtrafficking/presidentialinitiatives> (last visited Nov. 3, 2013).

Less success has been achieved in repatriating so called “gap material” that didn’t fall neatly into U.S. or Russian programs, such as material from third countries (see Figure 4).



Source: National Nuclear Security Administration.

Presidents Barack Obama and Dmitry Medvedev emphasized their commitment to the 2005 agreements at their July 2009 summit in Moscow, and noted “the importance of HEU minimization in civilian applications” and to “support such efforts to the maximum extent possible, where feasible.”¹¹ Those commitments were further extended in a September 2011 joint statement by the heads of the U.S. Department of Energy and the Russian state nuclear energy corporation Rosatom. It said that the two countries intended to “conduct joint efforts to convert research reactor cores in third countries from HEU fuel to LEU fuel, and examine the feasibility of converting U.S. and Russian HEU research reactors to LEU fuel in order to encourage other countries to take similar steps.”¹²

Over the past decade, a broader international consensus has also begun to emerge regarding the need to minimize the use of HEU. The final document of the 2000 Nuclear Nonproliferation Treaty Review Conference “note[d] with appreciation that many research reactors are discontinuing the use of highly enriched uranium fuel in favor of low-enriched uranium fuel...”¹³ The subject was further discussed in the 2005 review cycle, but that conference ended without a consensus final document.

¹¹ Office of the Press Secretary, “Joint Statement by President Barack Obama of the United States and President Dmitry Medvedev of the Russian Federation on Nuclear Cooperation” (The White House, July 6, 2009), available at http://www.whitehouse.gov/the_press_office/Joint-Statement-by-President-Barack-Obama-of-the-United-States-of-America-and-President-Dmitry-Medvedev-of-the-Russian-Federation-on-Nuclear-Cooperation (last visited Nov. 4, 2013).

¹² NNSA, “Joint Statement by the U.S. Department of Energy and State Atomic Energy Corporation ROSATOM on Strategic Directions of U.S.-Russian Nuclear Cooperation” (Vienna, September 20, 2011), available at <http://nnsa.energy.gov/sites/default/files/Joint%20Statement.pdf> (last visited Nov. 4, 2013).

¹³ Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document of the 2000 NPT Review Conference (New York, 2000), Vol. I, Part I, p. 6, available at <http://www.un.org/disarmament/WMD/Nuclear/pdf/final-docs/2000%20-%20NY%20-%20NPT%20Review%20Conference%20-%20Final%20Document%20Parts%20I%20and%20II.pdf> (last visited Nov. 4, 2013).

At the 2010 Review Conference, less progress was made on the subject of HEU than many had hoped in the face of the many other challenges and tensions that dominated the conference. Nonetheless, the consensus final document did, “encourage States concerned, on a voluntary basis, to further minimize highly enriched uranium in civilian stocks and use, where technically and economically feasible.”¹⁴

Civilian HEU was also highlighted at the UN Security Council summit held in September 2009, chaired by President Obama. Resolution 1887, which was unanimously adopted at that meeting,

Calls upon all States to manage responsibly and minimize to the greatest extent that is technically and economically feasible the use of highly enriched uranium for civilian purposes, including by working to convert research reactors and radioisotope production processes to the use of low enriched uranium fuels and targets.¹⁵ [emphasis in original]

Finally, minimization of HEU was endorsed at the April 2010 Nuclear Security Summit in Washington, which was attended by 38 heads of state or government of 47 states in total in attendance. In the final communiqué of the summit, the gathered states “encourage the conversion of reactors from highly enriched to low enriched uranium fuel and minimization of use of highly enriched uranium, where technically and economically feasible.”¹⁶

The summit’s work plan further noted that participating states “will collaborate to research and develop new technologies that require neither highly enriched uranium fuels for reactor operation nor highly enriched uranium targets for producing medical or other isotopes...”¹⁷

In addition to the agreed work plan and communiqué, many of the participating states made national commitments to reduce the use of HEU in their own territories or contribute more generally to the cause of nuclear security. Canada, for example, agreed to return a large quantity of HEU to the United States and to fund HEU removals from Mexico and Vietnam. Ukraine pledged to remove its entire stock of HEU by the 2012 Summit, and succeeded. In May 2010, 56 kg of Russian-origin HEU spent fuel were removed from Ukraine. Later, in December 2010, a total of 50 kilograms of HEU fresh fuel was removed.¹⁸ The final significant shipment of Ukrainian HEU left

¹⁴ Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, “Final Document of the 2010 Nuclear NPTreaty Review Conference (May 28, 2010), Vol. I, p. 29 (Action 61), available at [http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50 \(VOL.I\)\(last visited Nov. 4, 2013\).](http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50 (VOL.I)(last visited Nov. 4, 2013).)

¹⁵ U.N. Security Council, “Maintenance of International Peace and Security: Nuclear Non-proliferation and Nuclear Disarmament (DOC S/RES/1887, September 24, 2009), para. 25, available at [http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N09/523/74/PDF/N0952374.pdf?OpenElement \(last visited Nov. 4, 2013\).](http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N09/523/74/PDF/N0952374.pdf?OpenElement (last visited Nov. 4, 2013).)

¹⁶ The White House, “Communiqué of the Washington Nuclear Security Summit” (April 13, 2010), available at [http://www.whitehouse.gov/the-press-office/communiqu-washington-nuclear-security-summit \(last visited Nov. 4, 2013\).](http://www.whitehouse.gov/the-press-office/communiqu-washington-nuclear-security-summit (last visited Nov. 4, 2013).)

¹⁷ The White House, “Work Plan of the Washington Nuclear Security Summit (April 13, 2010), available at [http://www.whitehouse.gov/the-press-office/work-plan-washington-nuclear-security-summit \(last visited Nov. 4, 2013\).](http://www.whitehouse.gov/the-press-office/work-plan-washington-nuclear-security-summit (last visited Nov. 4, 2013).)

¹⁸ The White House, “Highlights of the National Commitments Made at the Nuclear Security Summit” (April 13, 2010), available at [http://www.whitehouse.gov/the-press-office/highlights-national-commitments-made-nss \(last visited Nov. 4, 2013\);](http://www.whitehouse.gov/the-press-office/highlights-national-commitments-made-nss (last visited Nov. 4, 2013);) NNSA, “NNSA Achieves Milestone in Removal of HEU from Ukraine,” National (31 December 2010, available at [http://nnsa.energy.gov/mediaroom/pressreleases/ukraineheuremoval \(last visited Nov. 4, 2013\).](http://nnsa.energy.gov/mediaroom/pressreleases/ukraineheuremoval (last visited Nov. 4, 2013).)

the country in March 2012, in time for the summit. Mexico joined Ukraine in having effectively removed all of its HEU stocks.¹⁹ Overall, since the 2010 Summit, about 530 kg of HEU have been removed from eight countries.²⁰

The 2012 Nuclear Security Summit, held in Seoul in March 2012, largely reaffirmed the consensus commitment to reducing and ultimately eliminating the use of HEU in civilian applications. In the official communiqué of the summit, states were called upon to eliminate HEU that was no longer being used, convert from HEU to LEU, work toward creating HEU policies under the framework of the IAEA, and to make additional individual commitments to HEU minimization by the end of 2013.²¹

Challenges

Technical

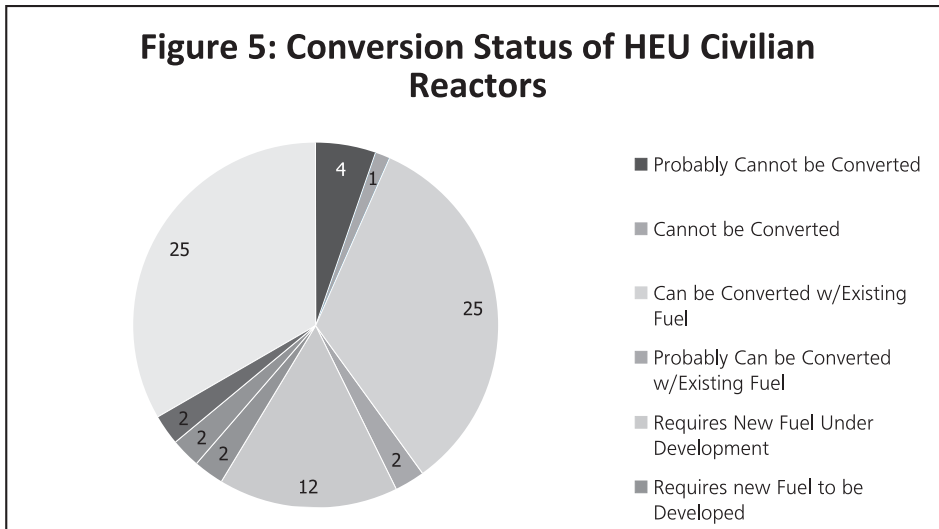
Converting reactors is a time-consuming and technically demanding process akin to using a new kind of fuel in a car engine while seeking to maintain the car's performance and safety and to not alter its basic dimensions or operating costs. The challenge is particularly difficult given that research reactors are even less standardized than power reactors, meaning that almost every conversion of a reactor requires a lengthy study to determine what changes can be made safely even before undertaking the years-long conversion process itself. A few reactors are seen as particularly difficult to convert either because of their individual dimensions or their high performance levels (see Figure 5).

Converting the reactor without altering its basic configuration generally involves finding ways to increase the amount of uranium in the core – enough to make up for the fact that LEU has far less U-235 than HEU (18% LEU, for example, would have only one fifth as much U-235 as 90% HEU). Reactor operators can increase the number of fuel assemblies relative to reflectors or “neutron poisons,” increase the amount of uranium in fuel assemblies by changing the basic design of fuel elements or changing the thickness of the zirconium or aluminum metal cladding that wraps around the uranium fuel, or increase the density or alter the composition of the fuel itself (see Figure 6).

¹⁹ It has been reported that Ukraine retains a small, indeterminate amount of HEU. Experts estimate it is tens to a few hundred grams – certainly not enough to construct a nuclear device. See Pavel Podvig, “Small Amount of HEU Remained in Ukraine” (International Panel on Fissile Materials, April 5, 2012) at http://fissilematerials.org/blog/2012/04/small_amount_of_heu_remained.html (last visited Nov. 4, 2013).

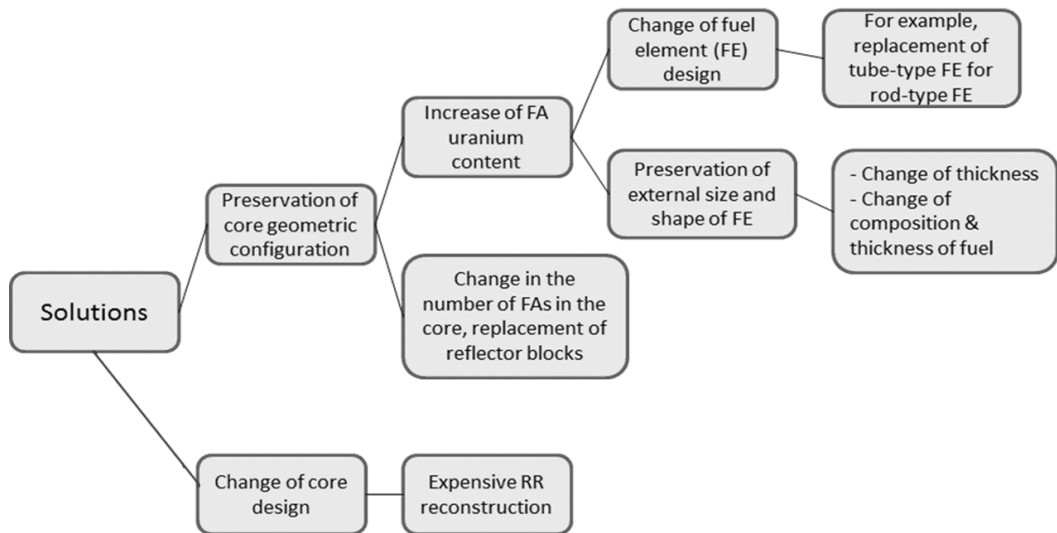
²⁰ U.S. Department of State, “Key Facts on the 2012 Nuclear Security Summit” (Bureau of International Narcotics and Law Enforcement Affairs, March 28, 2012), available at <http://www.state.gov/t/isn/rls/fs/187208.htm> (last visited Nov. 4, 2013).

²¹ *Ibid.*



Source: Pablo Adelfang, International Atomic Energy Agency, Conference Presentation 08-10 June 2011. These numbers do not include 50 defense and icebreaker reactors.

Figure 6: Conversion of Operating RR From HEU to LEU Fuel: Solutions to the Problem



Source: Tetiyakov, I.T., ROSATOM Company, JSC “NIKIET,” conference presentation 08-10 June 2011.

A number of different techniques have been advanced to accomplish these goals, some more successful than others. At the 2012 Seoul Nuclear Security Summit, four states (Belgium, France, South Korea, and the United States) agreed to further cooperate on the development of high-density LEU fuels.²² Nonetheless, the primary obstacles to conversion have been economic and political – insufficient funding, determined political objections, a lack of political will to alter the facilities or a lack of will to change the practices of established institutions. In a few cases, such as with South Africa and Belarus, the lack of action has reflected the desire of those countries to leverage their stocks for other political goals. South Africa, for example, has sought to tie any decision to relinquish its HEU stockpile to disarmament moves by the countries recognized as nuclear-weapons states under the nuclear Nonproliferation Treaty (China, France, Russia, the United States, and the United Kingdom).²³ More commonly, little action has occurred because of low threat perceptions, bureaucratic inertia, and the resistance of reactor operators. Some institutions have feared losing capabilities needed for research or to produce sufficient quantities of medical isotopes or losing the prestige that has sometimes accompanied the use of HEU.

Russia

Nowhere have these obstacles loomed larger than in Russia. Although Russia has played an important role in taking back HEU that it previously supplied to other countries, it has done little to tackle its own use of civilian HEU. Russia has as much as 30 tons of civilian HEU, and more than half of the research reactors and test facilities worldwide that use the material. At the 2009 Obama-Medvedev summit, Russia agreed for the first time to conduct feasibility studies “to explore possibilities for conversion” of research reactor cores.²⁴ To date, six of these feasibility studies have been completed. The studies indicated that one reactor could be converted immediately, four reactors could be converted once a substitute fuel finishes its certification process, and one reactor needs the development of a new fuel. Those results encouraged Russian officials to initiate a program in 2012 for the conversion of research reactors and medical isotope targets from HEU to LEU.²⁵

²² 2012 Seoul Nuclear Security Summit, “Joint Statement on Quadrilateral Cooperation on High-density, Low-enriched Uranium Fuel Production” (March 26, 2012), available at <http://www.whitehouse.gov/the-press-office/2012/03/26/joint-statement-quadrilateral-cooperation-high-density-low-enriched-uran> (last visited Nov. 4, 2013).

²³ Peter Fabricius, “SA Playing Both Sides of the Nuclear Coin,” *The Star* (March 30, 2012), available at <http://www.iol.co.za/the-star/sa-playing-both-sides-of-the-nuclear-coin-1.1267182> (last visited Nov. 3, 2013); William Potter and Gaukhar Mukhatzhanova, *Nuclear Politics and the Non-Aligned Movement* (International Institute for Strategic Studies, 2012), p. 129.

²⁴ Thomas Young, Cole Harvey, and Ferenc Dalnoki-Veress, “It’s Not Just New START: Two Other U.S.-Russian Nuclear Agreements Boost U.S.-Russian Reset” (James Martin Center for Nonproliferation Studies, December 21, 2010), available at http://cns.miis.edu/stories/101221_nuclear_agreements.htm (last visited Nov. 3, 2013).

²⁵ Nikolai Archangelskiy, “Russian Federation Perspective and Progress in HEU Minimization”, Presentation to RERTR-2012 Conference, October 15, 2012, Warsaw, Poland; Braden Civins, “Conversion Aversion: The Sources of Russian Reluctance to Conversion of HEU-Fueled Research Reactors” (University of Texas at Austin, 2011); Elena Sokova, “Phasing out Civilian HEU in Russia: Opportunities and Challenges,” *The Nonproliferation Review* 15(2) (2008), pp 209-236.

In addition to standard research reactors, Russia has the world's highest number of two types of facilities that involve very large amounts of HEU critical and subcritical assemblies.²⁶ These facilities, which are used for basic physics experimentation or to model reactor cores, represent difficult challenges both for proliferation and conversion. They have highly unique cores and fuel. Not only does their fresh fuel present a danger, but their spent fuel is lightly irradiated and lies in easy-to-transport discs, making them relatively safe to handle and potentially attractive to terrorists. Moreover, these facilities consume HEU so slowly that they essentially have lifetime cores and there is little economic incentive for facilities to convert since they can operate using their current HEU stocks.²⁷

Russia has 30 of these facilities, while European countries have only one. This difference, in part, reflects a Russian preference for hands-on experimentation instead of the computer simulations preferred by European counterparts (similar problems surround pulse reactors which fall within the defense sector and so would not likely be subject to a civilian ban). One positive recent development in this regard is that Kazakhstan has been working with the United States to convert a Soviet-era critical assembly in Almaty and the researchers at the Kazakhstan Institute of Nuclear Physics are anticipating that conversion may begin sometime this year.²⁸

Like their counterparts in the Russian and U.S. nuclear navies, Russia's civilian icebreakers also use HEU for naval propulsion with some ships carrying up to 200 kg of U-235.

Russia is also looming as a potential obstacle to the near-term goal of minimizing the use of HEU in medical isotope production. Formerly only a bit player in the global market, Russia is revving up its medical isotope production and planning to use both HEU fuel and targets to do so. Moscow recognizes that conversion will ultimately be required but first wants to repay its initial costs in establishing a processing facility for HEU targets and develops high-density LEU fuel.²⁹

HEU and Medical Isotope Production

Russia is only one of the obstacles to progress in converting medical isotope facilities to LEU. Other hurdles have included the technical difficulty of converting reactors to operate with less-enriched fuel, the economic costs of conversion, the disincentives for LEU-based medical isotope production and the construction of new LEU-based isotope production reactors, anxieties that conversion will exacerbate real and potential shortages of such isotopes, and political difficulties created by licensing requirements and by states and industries seeking market advantage.

²⁶ A critical assembly refers to a nuclear test reactor used to experiment and model full nuclear reactors and includes sufficient fissile material for a sustained nuclear chain reaction. A sub-critical assembly cannot sustain a nuclear chain reaction; an estimated 10 tons of HEU are tied up with critical and subcritical assemblies. See Kuperman, "Can RERTR Be Expanded to a Global Phase Out;" Pablo Adelfang, "Non-proliferation and the Reduction of Commercial Traffic in HEU."

²⁷ Ibid.

²⁸ F. Arinkin, et al., "Program of Critical Assembly Conversion to Low-Enriched Uranium Fuel at the Institute of Nuclear Physics in Kazakhstan" (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 24, 2011). Japan is the other pioneer in this regard and has been conducting a feasibility study on the conversion of the Kyoto University Critical Assembly. See H. Unesaki, et al., "On the Feasibility Study for Utilization of Low Enriched Uranium Fuel at Kyoto University Critical Assembly (KUCA)" (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 24, 2011).

²⁹ Anton Khlopkov and Miles Pomper with Valeriya Chekina, "Ending HEU Use in Medical Isotope Production: Options for U.S.-Russia Cooperation, Nuclear Threat Initiative", (Forthcoming).

Such isotopes are an important feature of modern medicine, particularly in the fields of medical imaging and diagnostics. The major medical isotope is the very short-lived Technetium-99m, which can be chemically-incorporated into small molecule ligands and proteins that concentrate in specific organs or tissues when injected into the body, allowing doctors to use them in medical scans that examine particular areas of the body.³⁰

Table 1: Selected Examples of Tc-99m Kits for Nuclear Medicine Diagnostic Imaging³¹

Kit Name	Imaging Procedure
Technetium Tc-99m Medronate (MDP)	Bone Scan
Technetium Tc-99m Albumin Aggregated (MAA)	Lung Perfusion
Technetium Tc-99m Pentetate (DTPA)	Kidney Scan and Function
Technetium Tc-99m Sulfur Colloid	Liver Scan
	Sentinel Lymph Node Localization
Technetium Tc-99m Sestamibi	Cardiac Perfusion
Technetium Tc-99m Exametazime	Brain Perfusion
Technetium Tc-99m Mebrofenin	Gall Bladder Function
Technetium Tc-99m Etidronate	Bone Scan
Technetium Tc-99m Disofenin	Gall Bladder Function
Technetium Tc-99m Succimer (DMSA)	Kidney Scan and Function
Technetium Tc-99m Tetrofosmin	Cardiac Perfusion
Technetium Tc-99m Bicisate	Brain Perfusion
Technetium Tc-99m Red Blood Cell	Blood Pool Imaging
Technetium Tc-99m Sodium Pertechnetate	Thyroid, Salivary Gland, Meckel's Scan
Technetium Tc-99m Lidofenin	Gall Bladder Function
Technetium Tc-99m Mertiatide (MAG3)	Kidney Scan and Function
Technetium Tc-99m Oxidronate (HDP)	Bone Scan

NOTE: MAA = methacrylic acid,
 MDP = methylene diphosphonate
 DTPA = diethylene triamine (pentaacetic acid)
 DMSA = dimercaptosuccinic acid
 MAG3 = mercapto acetyl triglycine
 HDP = hydroxymethylene diphosphonate.

³⁰ Committee on Medical Isotope Production without Highly Enriched Uranium, "Medical Isotope Production without Highly Enriched Uranium" (National Academy of Sciences, 2009), p. 25, available at http://www.nap.edu/openbook.php?record_id=12569 (last visited Nov. 3, 2013).

³¹ Extracted from the Food and Drug Administration approved pharmaceutical list, 2008; National Academy of Sciences, "Medical Isotope Production without Highly Enriched Uranium," pp. 2, 20.

More than 30 million such examinations take place around the world each year, with the United States alone accounting for 14 million procedures annually.³²

Because Technetium-99m has a half-life of only about six hours,³³ it must be produced continuously rather than stockpiled. Historically, it has been produced from the decay of the isotope Molybdenum-99 and that isotope, in turn, has been produced by irradiating an HEU target inside a research reactor (with the reactor in turn traditionally fueled by HEU). Neutrons from the reactor split the U-235 atoms in the HEU target. Some of the fragments created by these splits are Molybdenum-99 (henceforth “Mo-99”). In order to maximize the production of Mo-99 which has a half-life of 66 hours, the target is irradiated only briefly – five to seven days in most cases.³⁴ The target is then purified to produce bulk Mo-99 which is then placed in generators to produce Technetium-99m. Only around three percent of the uranium is used up in this process, leaving tens of kilograms each year of HEU left over as lightly-irradiated and proliferation-sensitive waste.³⁵

In addition, HEU has often been used as fuel in the reactors creating these isotopes. The total annual world demand for HEU for the production of medical isotopes is 40-50 kilograms,³⁶ nearly enough for two bombs each year with considerably more fresh and spent HEU fuel stockpiled around the globe. Production of such isotopes has been governed by a highly concentrated and unusually structured industry in which more than 90 percent of Mo-99 has been produced by irradiation in five largely government-run research reactors and then processed largely by four predominantly commercial Mo-99 processors (see Figure 7 below).³⁷

³² Miles A. Pomper and William C. Potter, “Medical Isotope Production: The U.S. Must Follow South Africa’s Lead,” *Bulletin of the Atomic Scientists* (17 December 2010), p. 2; Nuclear Energy Agency, “The Supply of Medical Radioisotopes: Interim Report of the OECD/NEA High-level Group on Security of Supply of Medical Isotopes” (Organization for Economic Co-operation and Development, 2010), p. 7.

³³ ICAN, “Weapon-grade Uranium and Radiopharmaceutical Production,” *International Physicians for the Prevention of Nuclear War*, at <http://www.ipnw.org/PDF%20files/HEUMedicalFactSheet.pdf> (last visited Nov. 3, 2013).

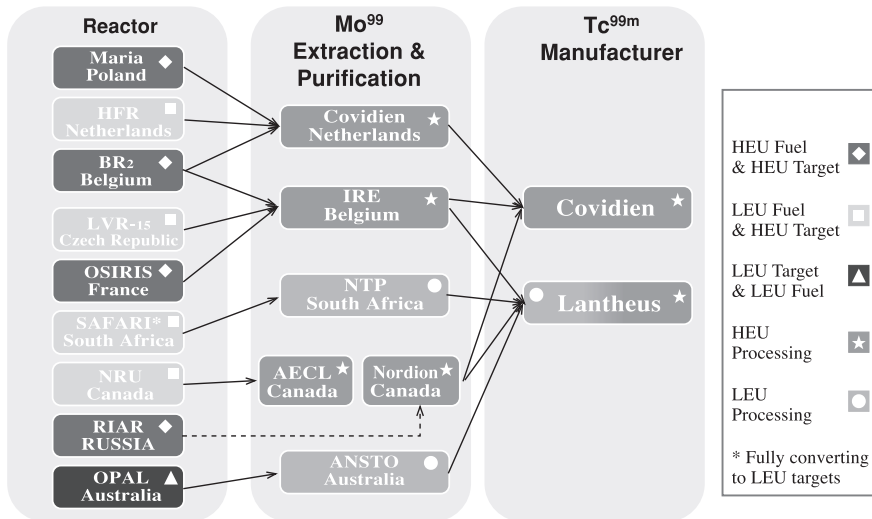
³⁴ Committee on Medical Isotope Production without Highly Enriched Uranium, “Medical Isotope Production without Highly Enriched Uranium.”

³⁵ *Ibid.*, p. 29.

³⁶ *Ibid.*, p. 11.

³⁷ Nuclear Energy Agency, “The Supply of Medical Radioisotopes” (Organization for Economic Co-operation and Development, 2010), p. 23.

**Figure 7: Medical Isotopes-
Current U.S. Mo⁹⁹/ Tc^{99m} Supply Matrix**



Source: Ira Goldman, "Toward a More Secure Future? Mo-99 Supply," Sept. 2011

For the last few years, NNSA has used a two-pronged strategy to establish a reliable supply of Mo-99 that does not utilize HEU. Domestically, NNSA has reached cost-sharing agreements ("Cooperative Agreements") with four U.S.-based producers to pursue nontraditional approaches to Mo-99 production that do not involve irradiating targets in traditional research reactors. Of these, one had reached the stage where it is expected to enter into commercial production in 2014. The idea is to eventually try to use these technologies to replace HEU-based production from countries such as Canada, which have traditionally provided the bulk of U.S. medical isotopes. The United States, in turn, provides nearly half of the world market for isotopes.

Meanwhile, the U.S and the IAEA have sought to both expand the number of small-scale regional Mo-99 producers in areas like Latin America or Eastern Europe and to help the major overseas producers convert to LEU. The toughest development challenges have involved the development of higher uranium density fuels and targets. As described, the increased density for fuel is needed to ensure that there is sufficient flow of U-235. For the target, the challenge is to maximize the yield of Mo-99, while minimizing waste from the additional uranium needed for LEU targets and seeking to ensure to the extent possible compatibility with existing processes for dissolving the irradiated targets and recovering as much Mo-99 as possible.³⁸ To date, all but one of the five reactors that have traditionally been used for large-scale production of Mo-99 (and more than 90% of the market supply) have been converted to use LEU fuel and the lone holdout, the BR-2 reactor in Belgium, is in the process of being converted although facing some technical difficulties in doing so.³⁹

³⁸ For more details, see G.F. Vandergrift, et al, "GTRI Progress in Technology Development for Conversion of Mo-99 Production to Low Enriched Uranium" (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 25, 2011).

³⁹ F. Charrolais, et al, "Leonidas U(Mo) Dispersion Fuel Qualification Program: Progress and Perspectives" (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 25, 2011).

The major reactors producing medical isotopes are spread across three continents: three in Europe, including the BR-2 in Belgium, HFR in Netherlands, and OSIRIS in France; the NRU in Canada; and the SAFARI-1 in South Africa (See Table 2 below)

Table 2: Major Reactors Currently Producing Mo-99⁴⁰

Reactor name	Location	Annual operating days	Normal production per week	Weekly % of world demand	Fuel/targets	Date of first commissioning
BR-2	Belgium	140	5200	25-65	HEU/HEU	1961
HFR	Netherlands	300	4680	35-70	LEU/HEU	1961
LVR-15	Czech Republic	—	>600	—	LEU/HEU	1957
MARIA	Poland	—	700-1500	—	HEU/HEU	1974
NRU	Canada	300	4680	35-70	LEU/HEU	1957
OPAL	Australia	290	1000 – 1500	—	LEU/LEU	2006
SAFARI-1	South Africa	305	2500	10-30	LEU/LEU*	1965
RA-3	Argentina	230	240	<2	LEU/LEU	1967

*Full conversion awaiting approval from foreign regulators.

The conversion of LEU targets has proven to be as much of an economic challenge as a technical one. A 2009 National Academies of Science study commissioned by Congress to consider the production of medical isotopes without HEU found that there are “no technical reasons that adequate quantities [of medical isotopes] cannot be produced from LEU targets in the future.”⁴¹ Indeed, LEU targets, in many cases, could simply be substituted in reactors, but this simple change would require reactor and Mo-99 processors to process about five times as many targets and an equivalent increase in waste. Some processors have claimed that their facilities might not be able to accommodate these higher throughput requirements without substantial modification, although some other process changes could mitigate this need. The increased reactor irradiation capacity that would be required could also be limited.⁴² Other alternatives in substituting LEU targets for the HEU variety include those similar to the changes in fuel elements and assemblies: making targets larger, or with a greater uranium density, or with more uranium meat and less cladding. All of these options would enable irradiating and processing fewer targets than simply substituting LEU fuel into existing targets, but could require new processes for producing Mo-99. In any case, production costs would likely rise marginally compared to the existing HEU targets and process, but without significantly increasing the cost of diagnostic imaging.⁴³

⁴⁰ Nuclear Energy Agency, “The Supply of Medical Radioisotopes: An Economic Study of the Molybdenum-99 Supply Chain” (OECD, 2010), p. 35, available at <http://www.oecd-nea.org/med-radio/reports/MO-99.pdf> (last visited Nov. 4, 2013).

⁴¹ National Academy of Sciences, “Medical Isotope Production without Highly Enriched Uranium,” p. 2.

⁴² *Ibid.*, pp. 91-92.

⁴³ *Ibid.*, p. 140.

One of the four major Mo-99 producers, the South African company NECSA, has committed to operate its medical isotope production facilities solely on the basis of LEU, with financial support from NNSA. In June 2009, the company announced that it had fueled the reactor itself with LEU. In October 2010, the United States signed a \$25 million contract with a consortium led by NECSA (and also including ANSTO of Australia, a smaller all-LEU producer) to import a significant quantity of isotopes produced completely with LEU. The first FDA-approved shipment of bulk Mo-99 was provided that December to a Boston-based company that provides Technetium-99m generators and, for a time in June 2011, the consortium was supplying one-third of the U.S. demand for Mo-99.⁴⁴ The targets have almost twice the uranium density of the previous HEU targets, with South Africa hoping to start development in soon of new targets, perhaps with even higher density.⁴⁵ European processors and reactors are planning to convert to using LEU targets by 2015 if they win regulatory approval by then.⁴⁶ Australia and Argentina, have utilized LEU for several years and Australia would like to substantially increase production and processing of LEU isotopes if market conditions permit.⁴⁷

⁴⁴ Previously, the reactor had been fueled with HEU from the former South African nuclear weapons program. NECSA, "Lantheus Medical Imaging Extends Contract with NTP Radioisotopes to Ensure Robust Supply of LEU-Produced Molybdenum-99" (Press Release, 31 October 2012), available at <http://www.necsa.co.za/Portals/1/Documents/44c04aee-3ac6-4eea-8ac9-9c88cf5aeff3.pdf> (last visited Nov. 4, 2013); Chloe Colby, "The Conversion of South Africa's Medical Isotope Production from HEU to LEU: Policy Implications for Global Conversion" (University of Texas at Austin, 2011), p. 9.

⁴⁵ NECSA was already using two to three times the number of targets because its enrichment was at the 45 percent level rather than the typical 90 percent. This eased the conversion process – and the resultant costs considerably from what might face other producers (Colby, "The Conversion of South Africa's Medical Isotope Production from HEU to LEU," p. 5). The uranium density in its new LEU fuel is 2.75g/cm³ compared to 1.42 g/cm³ in the previous HEU fuel. New varieties would require changes to processing effort but would seek to attain higher densities to get a greater Mo-99 yield and reduce waste. In particular, current dispersion LEU targets have more impurities than with HEU targets.

⁴⁶ See 2012 Seoul Nuclear Security Summit, "Belgium-France-Netherlands-United States Joint Statement: Minimization of HEU and the Reliable Supply of Medical Isotopes" (March 26, 2012), available at <http://www.whitehouse.gov/the-press-office/2012/03/26/belgium-france-netherlands-united-states-joint-statement-minimization-he> (last visited Nov. 4, 2013); Roy Brown, "Covidien's Experience with the Conversion from HEU to LEU;" Jean-Michel Veanderhofstadt, "Conversion of Belgium's IRE Mo-99 Production Process" (National Nuclear Security Administration Topical Meeting on Mo-99, December 4-7, 2011, Santa Fe, New Mexico).

⁴⁷ ANSTO has won agreement in principle to build a larger processing plant that can handle up to 3000 six-day curies per week – around 15-25 percent of current global market – as well as a waste treatment facility. But ANSTO officials have said that they can only go forward with this investment estimated at around \$250 million if other producers are paying full costs of irradiation and processing. See Adi Paterson, "An International Perspective on Practical and Economic LEU Based Production of Mo-99 incorporating the Full Materials Cycle," (NNSA 1st Annual Mo-99 Topical Meeting, Santa Fe, NM, USA, December 4-7, 2011).

Table 3: Potential New Projects for Mo-99 Production⁴⁸

REACTOR	Six-day ci EOP/yr	Six day ci EOP/wk	Weeks/yr	Potential first year
PROJECTS WITH PROCESSING FACILITIES AS PART OF PROJECT				
ROSATOM*/**	52 000	1 000	52.0	2013
ROSATOM*/** -TOTAL	130 000	2 500	52.0	2013
Babcock and Wilcox	144 000	3 000	48.0	2014
China advanced RR***	25 710	1 000	25.7	2015
CNEA, Argentina	-	-	-	2018
SAFARI - 2	108 930	2 500	43.5	2020
PROJECTS REQUIRING ADDITIONAL PROCESSING FACILITIES****				
MURR**	156 000	3 000	52.0	2012
FRM - II**	102 860	3 000	34.3	2015
GE - Hitachi	144 000	3 000	48.0	2014
US - LEU target technology	144 000	3 000	48.0	2014
US - Accelerator technology	144 000	3 000	48.0	2014
India	-	-	-	2015
OPAL	-	-	-	2015
INR, Pitesti**	120 000	3 000	40.0	2015
Jules Horowitz***	108 000	3 000	36.0	2016
South Korea (KAERI)	-	-	-	2017
PALLAS	266 390	6 215	42.9	2020
MYRRHA	178 290	5 200	34.3	2022

* Project includes three reactors, two of which would be used to produce 99Mo in a continuous fashion, with the third being a back up.

** Research reactor already exists, but is not yet irradiating targets for 99Mo production.

*** Under active construction.

**** Projects in Europe would face a processing capacity limitation.

These changes come at an economic cost – although the cost increase for the delivered pharmaceutical would be a fraction of that because it includes other costs that would not change, such as transport and marketing – and even the increased irradiation costs would represent less than one percent of the total cost.⁴⁹ The two major European producers – Covidien and the Belgian National Institute for Radioelements (IRE) – are working with NNSA towards being able to process LEU targets. In doing so, they have opted to accept a lower yield in the short term in order to meet the 2015 deadline for conversion. Over the longer term, they are working with the U.S national laboratories to try and develop high yield targets intended to yield more Mo-99 and produce less waste.

⁴⁸ OECD Nuclear Energy Agency, “Supply of Medical Radioisotopes,” p18; Ira Goldman, “Toward a More Secure Future? Mo-99 Supply”, September 2011.

⁴⁹ Interview with Gavin Ball, NECSA; Ron Cameron, “OECD-Nuclear Energy Agency’s Policy Approach for a Reliable Supply of Mo-99” (NNSA 1st Annual Mo-99 Topical Meeting, Santa Fe, NM, USA, December 4-7, 2011).

Still, particularly in the short term, LEU-based producers face lower yield, waste, and other costs than their HEU-based counterparts. In addition even as market has soared over recent decades amid rising demand for diagnostic scans; there has been little incentive for new irradiation facilities to be constructed as current producers built their facilities decades ago (see figure 8) with government funding and continue to benefit from operating subsidies that they then pass these on to processors in the form of below-market Mo-99 prices. The result has made it very difficult for new LEU-based competitors to enter the market.⁵⁰

In addition, NECSA and some officials in the countries also cite the difficulty in winning licensing approval from European and other governmental authorities to use the new materials in medical treatments, pointing to “complex and cumbersome” regulations as deterring potential customers. NECSA officials point out that Technetium-99m manufacturers in Europe have to gain regulatory approval for new LEU-based isotopes from each country in the European Union. Even though the new LEU-based Mo-99 conforms to current standards for the isotope and should not affect the resulting Technetium-99m, these regulatory approvals are expensive as they involve several sets of validation tests that require many samples and take considerable time.⁵¹ The licensing holdup has slowed NECSA’s conversion to full LEU-based production.⁵²

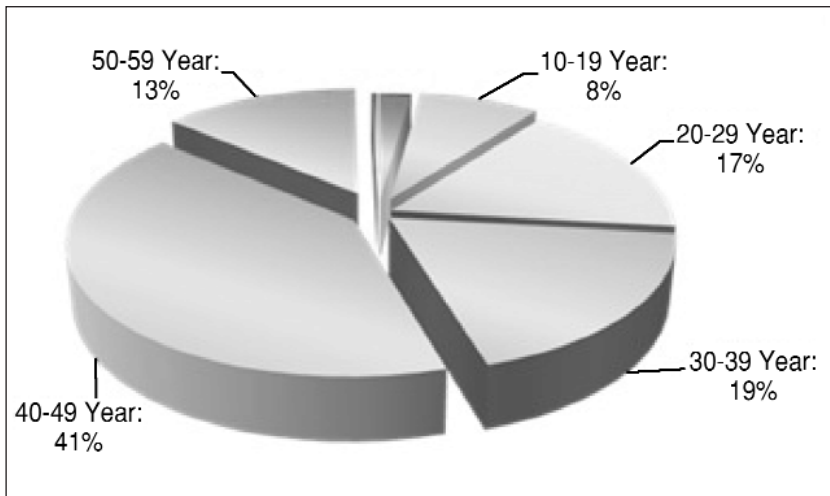
By contrast, the U.S. government took great pains to ensure that licensing did not pose a significant obstacle to the development of LEU-based Mo-99, closely coordinating efforts between NNSA, the Food and Drug Administration, and other agencies.⁵³

⁵⁰ Nuclear Energy Agency, “The Supply of Medical Isotopes – An Economic Study of the Molybdenum-99 Supply Chain” (Organization for Economic Cooperation and Development, 2010) p. 16.

⁵¹ US FDA approval, for instance, requires three irradiation runs, three purification runs, three generator runs using different size generators, and the use of this Tc-99m in three common pharmaceutical kits. Eric Duffy, “Approving Non-HEU Mo-99 for Use in the United States” (NNSA 1st Annual Mo-99 Topical Meeting, Santa Fe, NM, USA, December 4-7, 2011).

⁵² G. Ball, O. Knoesen and A. Kocher, “Status Update on Conversion to LEU Based Mo Production in South Africa,” (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 25, 2011).

⁵³ Duffy, “Approving Non-HEU Mo-99 for Use in the United States;” Ira Goldman, et al, “Qualification of Mo-99 TechnoLite Generators for National Regulatory Approval” (NNSA 1st Annual Mo-99 Topical Meeting, Santa Fe, NM, USA, December 4-7, 2011).

Figure 8: Aging Reactors

Source : Jong Kyung, “Current Status of the Construction of New Reactor in Korea,” conference presentation 15 november 2010.

These problems with the isotope market became evident between May 2009 and August 2010 with the shutdown of Canada’s NRU reactor. A survey of 1217 respondents conducted by the Society of Nuclear Medicine shortly after the Chalk River shut down found 90.71% of their facilities were affected by the Mo-99 shortage, with 64.17% having no access to an alternate technetium generator source. Many of the scheduled treatments had to be postponed, cancelled, or changed.⁵⁴ Further exacerbating the shortage, the HFR in the Netherlands was shut down for scheduled maintenance for a month in July 2009. At the time, the reactors supplied two-thirds of the world’s Mo-99.⁵⁵

Consequences of the 2009-2010 NRU Shutdown

The extended shut down affected the Mo-99 market in three different ways, all of which have an effect on efforts to convert to LEU fuel and targets, both in the short and long term:

1) Governments sought ways to ensure a sufficient supply of isotopes, given long term projections of supply shortages.⁵⁶ Methods included better sharing of information about proposed reactor shutdowns for maintenance reasons and efforts to coordinate such shutdowns and conversions to LEU fuel or targets so as not to interfere with sufficient supply. Longer-term

⁵⁴ The Society of Nuclear Medicine, “Isotope Shortage Survey Final Results” (The Society of Nuclear Medicine, 2009), available at <http://www.snm.org/docs/Isotope%20Shortage%20Survey%20Results%208-6-09.pdf> (last visited Nov. 3, 2013).

⁵⁵ Paula Gould, “Medical Isotope Shortage Reaches Crisis Level,” *Nature News* (15 July 2009), available at <http://www.nature.com/news/2009/090715/full/460312a.html> (last visited Nov. 3, 2013).

⁵⁶ Nuclear Energy Agency, “The Path to A Reliable Supply of Medical Radioisotopes,” *Nuclear Energy in Perspective* (June 2011).

measures included increasing production and asking the OECD Nuclear Energy Agency and the International Atomic Energy Agency to hold meetings and conduct fundamental studies to make recommendations to alter the market structure to prevent such supply shocks. The NEA concluded that governments should terminate their subsidies for irradiation facilities and allow both these facilities and processors to recover full market prices and that this would not have a significant effect on the price charged to patients or their availability.

2) One way of increasing production was for new entrants to join the field or for reactors that only supplied local markets to seek more of a global reach. Some of these included countries such as Poland and the Czech Republic that initially used HEU but are now moving to convert. Other countries such as South Korea have decided to move forward with their own LEU-based production in the future (see Table 3).⁵⁷

3) The 2009-2010 supply crisis prompted physicians and other participants in the supply chain to try to eke out greater efficiencies in the use of Mo-99 and Technetium 99-m and for doctors to restrain the use of the technology. Demand dropped during the supply crisis for medical imaging services using Mo-99 and has continued for at least some time afterwards. That led to an effective oversupply as the NRU facility was restarted and new entrants joined the field.⁵⁸ Companies like NECSA whose bottom lines were already squeezed by having to pay a premium for using fully LEU-based Mo-99 felt a particular pinch. The changes also indicated that there was more flexibility in demand than may be believed previously and that better models for forecasting demand and how it and public health might be affected under various scenarios were needed.

U.S. Policy

In response, the U.S. government has taken several steps to support the development of new Mo-99 production capabilities that utilize LEU or alternative non-HEU-based technologies. These include the passage of legislation to aid the development of a domestic non-HEU-based industry and administration-approved incentives to put non-HEU Mo-99 on an equal market footing with HEU and stimulate demand for them.⁵⁹

The American Medical Isotopes Act, for example, provides three key incentives for LEU-based production. First, the act bans U.S. exports of HEU for targets in Western Europe and Canada, although the legislation provided for such exports to be phased out over between 2020 and 2026. It also authorizes cost-sharing arrangements to generate domestic isotope production (as noted

⁵⁷ Nuclear Energy Agency, "The Supply of Medical Radiosotopes," pp. 11, 18.

⁵⁸ Chloe Colby, "The Conversion of South Africa's Medical Isotope Production," p. 12.

⁵⁹ See: Encouraging Reliable Supplies of Molybdenum-99 Produced without Highly Enriched Uranium," The White House Office of the Press Secretary, June 7, 2012, www.whitehouse.gov; the American Medical Isotopes Production Act passed as part of the Fiscal 2013 National Defense Authorization Act, Public Law 112-239; Jeff Chamberlin, "The Role of International Cooperation Programs in International HEU Minimization," presentation at the Second International Symposium on HEU Minimization in Vienna, Austria, January 2012. As part of stimulating demand, Veterans Health Administration offices have been encouraged and are beginning to purchase HEU-free Tc-99m.

above four projects in the U.S. have already received some seed funding and are highlighted in Table 3). Finally, it established government responsibility for waste disposition, providing a means to relieve operators of the financial, practical and legal burden of waste disposal.⁶⁰

The 2012 Summit: Some Progress, But Major Obstacles Remain

In the run-up to the 2012 Nuclear Security Summit, some ambitious ideas were put forward as the sherpas and sous-sherpas engaged in the process of drafting its communiqué. However, the outcomes of the Summit itself were limited. The United States and a number of its NATO allies seriously pursued the issue of HEU, but were largely scuttled by less cooperative countries like Russia and South Africa.

Prior to the Summit, France circulated a non-paper calling for the creation of HEU management guidelines (modeled on existing plutonium guidelines) to provide greater transparency on states' HEU holdings and tougher standards for security, transportation and international transfers. The guidelines aim at part at raising the cost of storing the material, encouraging states that are making little use of stocks to eliminate or consolidate them.⁶¹

These initiatives met substantial resistance. Some developing countries resisted drafting HEU guidelines as part of the summit process, saying such issues were best addressed within the IAEA. France and the United States (which supported the French effort) had to settle for much less, a few words in the communiqué stating: "We recognize that the development, within the framework of the IAEA, of options for national policies on HEU management will advance nuclear security objectives."⁶² In other words, no formal guidelines had been agreed upon and states retain a considerable amount of latitude in determining what their management policies will look like.

In addition, the United States sought to convince summit participants to endorse a 2015 deadline for eliminating the use of HEU in the production of medical isotopes, partly in a bid to convince Russia to embark on course of LEU-based production rather than HEU-based production. Developing states, Canada, and Russia resisted this effort, leaving the US-European commitment as the only progress in this regard. Indeed, South African President Jacob Zuma, while touting his country's efforts to convert its isotope production to LEU left open the possibility of continuing to use HEU instead.⁶³

⁶⁰ Miles A. Pomper and William C. Potter, "Medical Isotope Production," p. 4.

⁶¹ For a proposal on what such guidelines might encompass, see Christina Chuen, "Developing HEU Guidelines" (33rd International Meeting on Research and Test Reactors (RERTR), Santiago, Chile, October 25, 2011).

⁶² Communiqué from the 2012 Seoul Nuclear Security Summit, available at http://www.un.org/disarmament/content/spotlight/docs/Seoul_Communique.pdf (last visited Nov. 3, 2013).

⁶³ Peter Fabricius, "SA Playing Both Sides of the Nuclear Coin."

One major gift that the organizers had hoped to receive never materialized. Belarus, which was excluded from the first summit for its failure to make a similar commitment on HEU, subsequently made a similarly important commitment. In December 2010, U.S. Secretary of State Hilary Clinton and Sergei Martynov, the foreign minister of Belarus, signed a joint statement in which Minsk said it “has decided to eliminate all of its stocks” of HEU by the time of the Seoul Summit. NNSA officials said shortly thereafter that it anticipated that the shipments of the most dangerous fuel, including 40 kilograms (88 pounds) of weapon-grade HEU would take place in early 2012, shortly before the summit. In August 2011, however, Minsk said it would suspend the shipments until the United States lifted sanctions it had recently imposed on Minsk in response to a crackdown by President Alexander Lukashenko on his political opponents and the regime’s ties with Iran.⁶⁴

- However, a number of states did announce commitments to minimizing and eliminating HEU, representing some progress on the issue. In addition to the joint US-European commitments mentioned above:
- Canada continued its efforts to repatriate U.S.-origin HEU (it is estimated to have several hundred kilograms stored at its Chalk River facility), investigate reactor conversion, and assist Mexico and Vietnam with their HEU repatriation;
- China planned to convert the minireactors it built and supplied to other countries from HEU to LEU fuel; the Czech Republic will repatriate HEU to its origin states (about 40 kg);
- France joined Belgium in converting its reactors and developing high-density LEU fuel, while also working with the Netherlands to handle waste;
- and several other states, including Australia, Israel, Indonesia, Italy, Japan, Kazakhstan, South Korea, the United States, and many others pledged to contribute in some capacity to aid civilian HEU minimization.

Another important “house gift” included Poland’s pledge to convert its MARIA reactor by early 2014.⁶⁵

One contribution to HEU minimization came from an unexpected source. South Korea held a parallel meeting for industry leaders at the time of the 2012 Nuclear Security Summit and unlike its 2010 predecessor, it produced a substantial ‘joint statement’ on the part of the industry. The joint statement included relevant commitments to support the minimization of HEU in research reactors; expand the use of LEU targets for radioisotope production, providing that a continuous and stable supply of Mo-99 to the nuclear medicine community will not be jeopardized; and collaborate in international programs particularly those involved in innovating Mo-99 production techniques and developing and qualifying relevant high-density fuels.⁶⁶

⁶⁴ For more information, see Miles A. Pomper, “Bringing Belarus Back to the Table,” WMD Junction (September 20, 2011).

⁶⁵ Communique from the 2012 Seoul Nuclear Security Summit.

⁶⁶ Joint Statement of the Seoul Nuclear Industry Summit (March 23, 2012) available at http://www.seoulnis.org/upload/data/NIS-ENGLISH-Joint_Statement_of_the_2012Seoul_Nuclear_Industry_Summit.pdf (last visited Nov. 3, 2013).

New Strategies

It is important to note that the summit is just one milestone in a long-term and already decades-long effort to minimize HEU. In order to be successful going forward, this effort should include the following goals:

- 1) Promote HEU guidelines and an HEU ‘code of conduct.’ Working through or outside the IAEA, those states that hold significant quantities of HEU should seek to advance the guidelines. It may be easier to win support for these efforts one-by-one rather than in an extended multilateral negotiation. Another idea that should be considered to build on the support of the 2012 Nuclear Industry Summit is support for a voluntary code of conduct on HEU minimization in which various stakeholders – operators, customers, and governments – can pledge to take steps to minimize and ultimately eliminate HEU.⁶⁷
- 2) Explore the idea of creating regional “zones free of nuclear weapons usable material” akin to nuclear weapons free zones in areas like Latin America or Central Europe.⁶⁸
- 3) Shine the light of publicity on outliers like Russia, Belarus, and South Africa. U.S. efforts have succeeded in reducing the number of countries in the world with HEU, successfully “cleaning out” all the HEU and plutonium in 21 countries by 2012, according to a post-summit briefing by NNSA.⁶⁹ However, a small number of countries continue to play a disproportionately negative role in reducing the threat of nuclear terrorism. It is time for the U.S. and other countries to ‘name and shame’ the outliers.
- 4) Facilities for which LEU fuels are not available, a commitment should be made to reduce enrichment below weapons grade and to the lowest grade possible until such time as LEU fuel can be qualified.
- 5) Buttress the international norm that LEU will be used in place of HEU in any new facility or process under development, design, or construction, ensuring that it extends to possible new applications such as space reactors)
- 6) Develop an international cooperative research and development program to examine the options for the management of spent fuel from newly developed LEU-fuel types resulting from conversion efforts
- 7) Encourage security requirements that correspond to material types and demonstrate where conversion to LEU assists in lowering security costs, in order to encourage conversion decisions.

⁶⁷ For information about a proposed code, see Christina Hansell, et al, “Building Momentum to Minimize HEU Use, Improve Nuclear Security and Combat Nuclear Terrorism” (International Symposium on Nuclear Security, Vienna, April 2, 2009).

⁶⁸ Nuclear Threat Initiative, “Summary of the 2nd International Symposium on HEU Minimization” (January 25, 2012), available at <http://www.nti.org/analysis/articles/summary-2nd-international-symposium-minimization-highly-enriched-uranium-heu/> (last visited Nov. 3, 2013).

⁶⁹ Andrew Bieniawski, “Update on NNSA’s Global Threat Reduction Initiative (GTRI) and Nuclear Security Summit Outcomes” (Washington DC., April 17, 2012).

- 8) Continually assess to what degree and to what enrichment level HEU is needed for scientific research.
- 9) Set a Global Deadline for Phasing out HEU-Based Medical Isotopes. The 2014 Nuclear Security Summit could be used to establish a road map for such a purpose.
- 10) LEU needs to be competitive economically with HEU in order to displace HEU in a competitive marketplace.
- 11) Other NATO states should follow the US lead in instituting policies to encourage consumption of non-HEU based Mo-99.
- 12) Cultivate New Leaders. For decades, the United States has borne the lion's share of the HEU minimization effort. Particularly given U.S budget difficulties, other countries, especially EU and NATO states and fast-growing Asian countries such as South Korea and China, need to do more in this regard and fortunately both already are beginning to do so. South Korea's pledge to assist in developing high-density research reactor fuels are a step forward as is China's efforts to convert the HEU-based Miniature Neutron Source Reactors that it supplied to other countries and pledged to take back their fuel. An instrument that might be used to solicit further contributions in this regard, particularly for converting Russian reactors is the G-8 Partnership against Weapons of Mass Destruction, which seems to be casting about for a new mission.
- 13) Initiate a discussion on the conversion of naval reactors. France and others in the now regularized P-5 discussions on disarmament and nonproliferation should seek to use that forum to initiate a discussion on the use of LEU in naval and propulsion fuel. If this is not possible, this should be the subject of a dialogue between the United States and Russia, perhaps led by their academies of science. As long as fabrication or fuel facilities are still handling HEU, the possibility of terrorist acquisition of this material remains high.
- 14) Link Efforts to Minimize Civil HEU to Efforts to Curtail Weapons HEU. In the long-term, the efforts to ban HEU in civil purposes and naval fuel will need to be linked with discussions on a Fissile Material Control Treaty, which would ban the production of fissile materials for nuclear weapons. The initial goal should be to ban all production of HEU for any purpose, civil or military. In the short term, the United States and Russia could bolster other countries' support for efforts to minimize civil HEU by taking further steps to reduce their holdings of weapons HEU. By the time it ends in 2013, the "Megatons to Megawatts" program will have downblended 500 tons of Russian weapons HEU for use in U.S. power reactors. In particular, these two countries should seek to continue this effort, making sufficient adjustments to make it more palatable to Russia. In order to wean developing countries like South Africa off their HEU, the United States and Russia could consider declaring as excess to their military needs 10 kilograms of HEU for each kilogram of HEU South Africa agrees to downblend or send to either country for downblending.

These initiatives are a natural extension of the HEU minimization process already underway, and signal a serious commitment to securing this vulnerable nuclear material from theft and illicit trafficking. Such steps, however, require broad international consensus.

The Nuclear Security Summit process has lost some of the momentum necessary to encourage such consensus and progress, and a failure to forge ahead with bolder policy options could threaten the high-level attention nuclear security has recently received. Current minimization efforts remain piecemeal and vary state-to-state. No single, legally-enforceable standard exists to verify that states are taking concrete steps toward reducing or eliminating their HEU use. There is simply no need for HEU use to continue, especially when one considers the risks associated with it – namely, how easily it can be used to create a crude nuclear weapon. As the summit process, and HEU minimization more broadly, moves forward, all states must remember that they have a vested interest in pursuing HEU minimization. It is a simple, common-sense policy with a real pay-off: Significantly reducing the risk of nuclear terrorism while maintaining the advances provided by civilian nuclear technology.

Conclusion

The threat posed by current stocks of highly enriched uranium (HEU) is clear, as well as the need to reduce these stocks. Although both technical measures – such as new processes to produce Mo-99 – and diplomatic measures – such as the 2012 Nuclear Security Summit – show promise, this threat has not been reduced to acceptable levels. Therefore, the world community needs to continue to cooperate in reducing HEU stocks, improving security of such materials and developing alternate technologies that do not require HEU. Although such measures are difficult and require a great deal of effort, they are nothing compared to the effects of a terrorist attack using these materials.

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National, Homeland and Human Security: Conceptual Development, Globalization and Risk

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Abstract: *Since the events of September 11, 2001, the concept of homeland security has achieved prominence in mainstream political discourse and institutional form in the domestic policies of many NATO members and international partners. Homeland security is assessed in this discussion as a development that is continuous with national security. Insofar as this is the case, its utility is constrained by a definition that establishes the principal site of the security - the homeland - in a bounded and limited form. This excludes, and potentially marginalises, identities, territories and interests that fall outside its meanings, in turn calling into question the efficacy of homeland security as a vehicle of counterterrorism and counterinsurgency, and pointing to the requirement for a more comprehensive conception in keeping with the demands and complexity of an irreversibly globalized security environment. To address this lacuna the concept of human security, established as a practical approach within the United Nations Development Report of 1994, is outlined. Uncertainties surrounding its development indicate that security itself is a concept in transition that is located and developed within contexts of globalization and cosmopolitan risk that are characteristic of the risk society thesis expounded by Ulrich Beck. Human security does not present itself as a simple alternative to, or replacement for, established models of physical and territorial security. In establishing an agenda for security that exceeds these conventional boundaries it does, however, enable a necessary rethinking of both conceptual limits and practical materializations of security in response to the challenges and possibilities that globalization presents. Elements of this rethinking are considered in the context of ongoing NATO operations in Afghanistan, and the relevance of human security to the reformulation of NATO's strategic concept noted.*

Keywords: *Globalization, Human Security, Reflexivity, Risk, Risk Society*

Introduction

Homeland security was established and institutionalized by the United States Government within months of the events of September 11, 2001, and as a concept was just as quickly incorporated and normalized within the vocabularies and practices of security by other nations. That this was possible suggests the extent to which, as a concept, homeland security is a development that is consistent, and compatible, with preceding security doctrines and organisational apparatuses associated with national security in the United States during the opening stages of the Cold War, which received international extension in the formation of NATO at the 1949 Washington conference. The transatlantic bargain of 1949, and the uneasy but sustained 'Pax Americana' of the next forty years within the North Atlantic region, established a context that supports the interpretation of homeland security as a conception that is continuous and coherent with the institutional architecture of national security. This continuity in part explains the rapidity of the formation of homeland security, and its integration into existing security practices. It also, however, presents concerns regarding the boundaries and limits contained within the name of the term itself. Insofar as homeland security inevitably and, indeed, necessarily, takes as its primary focus the protection and security of domestic and internal spaces and interests, it inevitably accords a lesser significance to potential risks and threats defined externally, and therefore outside the conceptual and territorial boundaries of the homeland. Although much of the interagency cooperation, emergency planning and enhanced resilience, and the securing of travel and essential infrastructures associated with homeland security is unquestionably of value in its own right, it typically occurs – both within the US and other countries such as the UK and France, which have enacted many parallel measures – within these nationally determined boundaries of security and interest.

Two issues arise from this of particular note in respect of homeland security as part of an overall scheme or strategy constructed in response to perceived threats presented by terrorist actors. Firstly, as a concept predicated on the notion of a boundary between the homeland to be protected and the implicitly less significant area outwith that domain, homeland security is exclusive in structure, defined by a distinction between the internal and external that inevitably affects its scope and utility. Secondly, in the context of a terrorist threat that is both globalized and territorially diffuse, this distinction – and the messages that it conveys about the primacy of nation and home to those at the margins of, or excluded from, the protections that it offers – is one that inevitably also describes limits of, and potentially contradictions within, homeland security as a counterterrorist practice. In order to address these, an alternative model, of human security rather than homeland security, is considered here. Human security, as the name suggests, is organized around a general and universal, rather than domestic or particularistic, interpretation responsibility to protect. The discussion proceeds by introducing human security and establishing its potential as a model of security befitting an era characterised on one hand by the blurring of conventional boundaries and concepts attending order, power, risk and conflict provoked by irreversible processes associated with globalization, and on the other by a more welcome – but no less challenging – articulation and entrenchment of claims to rights, protections, capacities and entitlements that are, in keeping with the impetus of globalization, universal in scope.

This claim to universality is not made in opposition to the local and specific, but is rather realized through it, resolved in the conduct of social life at the level of community, tribe or nation, and of the language and culture, that particular forms of life embody, and through that simultaneously as properties of the discrete individuals constituting and participating within them. After outlining the concept of human security, the discussion proceeds to consider it in relation to parallel debates and discourses surrounding risk and risk society, in particular through the work of the German sociologist Ulrich Beck. The relevance of these debates to NATO, in terms of both strategy and practice in Iraq and, most notably, in the planning and conduct of ongoing operations in Afghanistan, is noted, and the discussion concludes with a provisional assessment of the likely significance of human security to the forthcoming reformulation of NATO's defining strategic concept.

Human Security: Origins and Debates

Both critics and advocates of human security agree that the term is an ambiguous one. This ambiguity does not constitute an inherent conceptual flaw, but does indicate the requirement to extend discussions beyond currently prevalent debates on the role of the state in the production and maintenance of conditions of security and the institutions that maintain and underwrite it.¹ Three features in particular distinguish the relationships outlined in the discussion here. Firstly, if it is to be rendered distinct from, or avoid subsumption within, conventional models of national and homeland security, human security must be thoroughly situated within contexts of globalization and complexity that are hallmarks of the notion of the 'risk society' as expounded by Ulrich Beck. This emphasis counters the tendency of nation-states to monopolise the provision of security, and creates a space for concept formation and practical action for that is, in so far as is possible, independent of established conventions and materializations of security and securitization. Secondly, human security – in part because of this independent form – offers itself as a part of the very processes of modernization that are fundamental to risk society² and thirdly, in so doing it places in question established assumptions concerning the meanings and requirements of security itself, generating novel solutions and approaches in response to the challenges of a global and unpredictable risk environment.

This approach differs from those defining human security within existing cooperative arrangements such as those provided by the 'risk community' of NATO.³ Human security is, of course, highly relevant to such established alliances and institutions, and the interpretation and evaluation of long term security, reconstruction and development projects such as the KFOR

¹ See, e.g., Nicholas Thomas and William T. Tow, "The Utility of Human Security: Sovereignty and Humanitarian Intervention," *Security Dialogue* 33(2) (2002), pp. 179 – 192; Alex J. Bellamy and Matt McDonald, "The Utility of 'Human Security': Which Humans? What Security? A Reply to Thomas and Tow," *Security Dialogue* 33(3) (2002), pp. 373-377.

² Ulrich Beck, *Risk Society: Towards a New Modernity* (Sage, 1992), p. 76.

³ Christopher Coker, *Globalisation and Insecurity in the Twenty-first Century: NATO and the Management of Risk* (Oxford University Press, 2002), p. 70; Mikkel V. Rasmussen, "Reflexive Security: NATO and International Risk Society," *Millennium* 30(2) (2001), pp. 285-309.

Kosovo missions and, most pressingly, the ongoing ISAF engagement in Afghanistan (ISAF) can hardly proceed without significant reference to human security. This is also the case with much of the activity undertaken by the United Nations, which pioneered the use of the term within its Human Development Programme. As this range indicates, human security requires a measure of conceptual independence and it is not a model that can be defined, imposed, privileged or limited within a specific location or exemplary institutional form. It is rather an adaptive framework that seeks to interpret, realise and protect the rights and entitlements of citizens within practices associated with security in all its forms, from the highest level of strategic formation to the most mundane of operational realities and all points between.

The enlarged context enabled by these developments extends human security beyond the boundaries of debates that are dominated on one side by 'realist' state-centric critics, and on the other by more pragmatic advocates emphasising the humanitarian and developmental potential of human security. The emphasis upon risk and globalization instead calls attention to how issues conventionally understood as prerogatives of the nation-state assume the form, in our late modernity, of distinctly new domains that require novel and alternatively structured responses. The capacity of existing institutions to adapt in response to these transformations is, at best, unclear. Accordingly, the understanding of human security proposed does not simply replace, replicate or confuse existing securitisation categories. It instead defends a critical approach towards a new space of questioning, and contributes to the extension of security and risk as areas of research and of practice.

The term 'human security' cannot be traced back to a single point of origin,⁴ but unquestionably rose to prominence in the form of policy orientations announced in the 1994 United Nations Development Program (UNDP) Human Development Report.⁵ As part of the statement of priorities and objectives announced in this report, human security initiated a transition in the interpretation of security from the politics of state, sovereignty, and military power towards an alternative understanding focused upon the "legitimate concerns of ordinary people...symbolized [by] protection from the threat of disease, hunger, unemployment, crime, social conflict, political repression, and environmental hazards."⁶ This list, as is hardly necessary to note, is as question-begging as it is wide ranging. A decade later, the report of the UN High-level Panel on Threats, Challenges and Change identified "harm to State or human security" as "basic criteria of legitimacy" in the justification for military intervention.⁷ This further individuation and reframing of security and its objectives was finally endorsed and consolidated in 2005 reform proposals advanced by Secretary-General Annan, ambitiously echoing the preamble to the 1946 charter

⁴ Dan Henk, "Human Security: Relevance and Implications," *Parameters* XXXV(2)(2005), pp. 92; Edward Newman, "Human Security and Constructivism," *International Studies Perspectives* 2 (2001), pp. 241-243.

⁵ See United Nations Development Programme, *Human Development Report 1994* (Oxford University Press, 1994); S. Neil MacFarlane and Yuen Foong Khong, *Human Security and the UN: A Critical History* (Indiana University Press, 2006).

⁶ United Nations Development Programme, *Human Development Report 1994*, p. 22.

⁷ United Nations, "A More Secure World: Our Shared Responsibility" (Report of the Secretary General's High-Level Panel on Threats, Challenges and Change, Document A/59/565, United Nations, 2004), pp. 57, 85.

document, under the title *In Larger Freedom*.⁸

The conjunction of the formative objective of the UN – collective security – with the individual freedoms of ‘ordinary people’ and non-territorialized development suggests just how significant an extension of the security remit the human security initiative involves. The UN’s variable fortunes in achieving its originally chartered mission also indicates the exacting nature of the challenge that reconciling individualism and globalisation through human security poses. As such, human security is bound up with the emergence of a political accommodation that initiates a cautious transition from the assumptions and foundations of the national security model characteristic of the Cold War and its aftermath. Human security is thereby coextensive with the formation, often contentiously, of multilateral norms, laws, treaties and institutions (most notably perhaps exemplified by the International Criminal Court) that are located not only within established forums of national and multinational co-operative security forums, but also in transnational and postnational bodies, and in the related activities of commercial, charitable and non-governmental organisations. Upon this canvas, human security emerges – in ambition, if not yet in actuality – as individual in focus, universal in justification and global in application.

Commensurate with the rapid unfolding of this global reframing of security, the scope of human security is as expansive as it is diverse. It has, for example, been conjoined with overlapping concerns including identity and migration, energy, health, welfare, environment, economics, food, water, and non-proliferation, to name but a few of the applications consolidated, in a recent survey of the field, as “an agenda for change.”⁹ Setting aside the unquestioned interest and value of the individual contributions to this collection, amongst its most remarkable features is the silence on the status of human security in relation to established theories and modes of international relations, security and risk. Indeed, the self-contained and overwhelmingly positive account offered in the volume implies that the role and rationale of human security is unproblematically established, and that whatever obstacles it confronts are practical rather than conceptual in nature.

This apparent practical success has, inevitably, been accompanied by significant critical attention, and human security is an established source of discord amongst analysts. Ostensible disagreements between critics who challenge human security as an extension that confuses, depletes, dilutes, or exhausts of meaning the very idea of security, and advocates who celebrating the pragmatic enlargement of security into post-territorial areas of rights, resources and development serve to obscure an underlying and fundamental agreement.¹⁰ This is that whether human security is welcomed as a pragmatically expansive container for responses to the burgeoning set of threats that are now classified as security issues, or rejected as a vague and potentially damaging source of confusion, proponents of either stance accept that the concept of human security is riddled with ambiguity.

⁸ United Nations, “*In Larger Freedom: Towards Development, Security and Human Rights for All*” (Report of the Secretary General, Document A/59/2005, United Nations, 2005), p. 35.

⁹ See Felix Dodds and Tim Pippard, *Human and Environmental Security: An Agenda for Change*. (Earthscan, 2005).

¹⁰ See Taylor Owen, “Human Security: Conflict, Critique, and Consensus – Colloquium Remarks and a Proposal for a Threshold-Based Definition,” *Security Dialogue* 35(3) (2004), pp. 373-387.

If human security it is to offer a significant alternative to or development of prevailing models, it demands formulation outside the orthodoxies of sovereignty, nation, state and interest that inform conventional security studies and the conduct of international relations. A helpful precedent is provided here by the 'Copenhagen School' of security studies, which defended the move from a state-centric model towards a more multifaceted interpretation of security with the insistence that "there are many ways to understand security...each will have its merits and its drawbacks."¹¹ This opens the way towards the position where, under conditions of contemporary globalisation "in order to grasp the way other things than states had become referent objects for security discourse,"¹² the level of analysis need not be fixed upon the sovereign state. Buzan's rejection of human security as a 'reductionist' notion that sits ill with the regional and societal focus of his own preferred theory does not affect the force of this contention.¹³

Given that it is firmly established within the security lexicon, the uncertainties associated with human security can no longer be overlooked or explained away as useful or productive,¹⁴ or resolved by inverting the question in order to establish the meanings of human security through "the other side – that is, what constitutes insecurity."¹⁵ Indeed, given the indefinite possible iterations of insecurity, this is more likely to restate than resolve debates about the scope and significance of the term. In the early stages of concept formation, a level of ambiguity might be expected, but after a decade and more of debate it is reasonable to anticipate the emergence of a measure of agreement. That no such understanding is apparent suggests a deficiency within the structure of the debate, rather than the concept itself. Instead of dismissing or lauding human security, attempting to offer a further definition of the term, or maintaining that although it may not work in theory it can nevertheless continue to be 'mainstreamed' in practice,¹⁶ the lacunae within discussions of human security can be more constructively addressed by the incorporation of themes drawn from similarly novel developments within social and political theory. By highlighting the importance of risk and risk society, a fuller account of the concept, context and capacity of human security is afforded that, rather than resolving disputes within international relations theory over the centrality or otherwise of the state, and the interests and identities that dominate it, overcomes such preoccupations by relocating the terms of debate within global contexts and thereby diminishing their relevance.

¹¹ Barry Buzan and Ole Waever, "Slippery? Contradictory? Sociologically Untenable? The Copenhagen School Replies." *Review of International Studies* 23 (1997), pp. 249-250.

¹² *Ibid.*, 242.

¹³ Barry Buzan, "A Reductionist, Idealistic Notion that Adds Little Analytical Value," *Security Dialogue* 35(3) (2004), pp. 369-370; Barry Buzan and Ole Waever, *Regions and Powers: The Structure of International Security* (Cambridge University Press, 2003), pp. 70-76.

¹⁴ See Pauline Ewan, "Deepening the Human Security Debate: Beyond the Politics of Conceptual Clarification," *Politics* 27(3) (2007), pp. 182-189.

¹⁵ David Roberts, "Human Security or Human Insecurity? Moving the Debate Forward," *Security Dialogue* 37(3) (2006), p. 258.

¹⁶ Edward Newman, "Human Security: Mainstreamed Despite the Conceptual Ambiguity?" *St. Antony's International Review* 1(2) (2005), pp. 24-36.

Security in Transition: Globalization, Reflexivity and Risk

Risk in general, and especially the concept of ‘risk society’ as developed through the work of Ulrich Beck,¹⁷ is fundamental both throughout the human sciences, and within the analysis and assessment, control, prevention and protection that are essential features of security in any of its myriad potential formulations. The absence of an explicit treatment of risk from current debates surrounding human security is therefore anomalous. Human security, as noted above, is constituted as a resolution of both particular and universal claims: the particular of each individual in respect of a spectrum of protections, needs and entitlements; and the universal in respect of its global range of application, extending to all humans irrespective of transient contingencies of location, circumstance and fate. The concept of the risk society is similarly attuned to the dual imperatives of individualization and globalization and their multiple effects in the production of forms of life where manufactured uncertainties – the unpredicted and often unpredictable outcomes and side-effects of human action – ensures that the proliferation of risks exceeds the boundaries of the established nation state, and the capacities of its institutions and political formations.¹⁸ The nation-state persists, of course, but does so increasingly as a ‘zombie category,’¹⁹ caught between, and transformed by, centrifugal and centripetal forces exerted simultaneously by the local and the global. Issues arising with regard to organised crime, energy supply, technology transfer, environmental standards, infection control and any number of similar areas, are no longer predictable and controllable in the manner assumed by industrial society, or routinely divisible into national and international categories. Equally, sovereign inviolability is slowly but inexorably being eroded as an alibi for nation-states with regimes – such as Zimbabwe and Sudan – that are deemed to be failing to protect the interests of their citizens. In an era of ever-increasing global complexity, speed and interdependence, responding to risk requires intervention by institutions and agencies invested with the explicit ‘responsibility to protect’ the security of all individuals through flexible processes and institutions of transnational mediation and exchange.²⁰

Human security can accommodate this requirement because it is not defined by or constrained within particular territorial or institutional orders. Although it can of course be adopted and employed by nation-states, as well as by wider institutions such as NATO or the UN, this usage is always contingent rather than defining. No particular organisational form can either claim a monopoly, or seek to impose a specific definition or doctrine as authoritative. Instead, human security articulates and responds to consequences of globalization by recasting issues, including physical safety, basic rights and entitlements, development, health and resource allocation, as areas that enjoin and mandate both protection and, prospectively, pre-emptive and other forms of

¹⁷ See Ulrich Beck, *Risk Society: Towards a New Modernity* (Sage, 1992); Ulrich Beck, *World Risk Society* (Polity Press, 1999); Ulrich Beck, “Living Your Own Life in a Runaway World: Individualisation, Globalisation and Politics,” in *On The Edge: Living with Global Capitalism* (Will Hutton and Anthony Giddens, eds., Vintage, 2001).

¹⁸ Beck, *World Risk Society*, pp. 31-34.

¹⁹ Ulrich Beck and Elizabeth Beck-Gernsheim, *Individualization* (Sage, 2002), p. 206.

²⁰ United Nations, “In Larger Freedom: Towards Development, Security and Human Rights for All” (Report of the Secretary General, Document A/59/2005. United Nations, 2005), p. 35.

intervention. These and similar issues are therefore significant as risks that may provoke securitising responses irrespective of the borders and conventions of territorial sovereignty, providing criteria within which human security emerges as a post-national model of a concept in transition.

The risk-centred framework also importantly highlights the reflexive character of the model provided by human security. Reflexivity is a fundamental feature of Beck's development of the risk society, but also amongst its most opaque aspects. The elaboration of the risk society model is replete with examples of risk and modernization, connecting for example global issues such as ecological threats to localized political formations, and to individual experience of and responses to a life-world in transformation.²¹ Within these narratives, reflexivity involves the critical development of a modernity that becomes its own theme or subject, as societies, and the orders of which they are a part, incorporate self-scrutiny and questioning within processes of development that are no longer straightforward narratives of "progress: the more modern a society becomes, the more unintended consequences it produces, and as these become known and acknowledged, they call the foundations of industrial modernization into question."²² At the broadest sociological level, reflexivity can be captured as the increasing problematization of "the self-images of the age,"²³ and as the attempt to come to terms with the unceasing complexity and uncertainty of contemporary experience.

At the more immediate level of personal experience, reflexivity is an accessible and familiar concept. This is unsurprising given the ubiquity of the psychological, whether professional or popular in form, as a focus of contemporary cultural, literary and media productions. Reflexivity here invokes the incorporation of risk and uncertainty in all of their manifold diversity within the commonplace awareness and interpretive practices of individuals and groups. Rather than being located and contained within discourses of authority and expertise, risk is implicated in, and attains ubiquity as a grounding of, underlying concepts of experience and existential threat. In this form it is inscribed as a personal, cultural and aesthetic phenomenon in relation to identity and individualization in Beck's work, within which the most common figure is the dislocated isolate coming to terms with life in a "runaway world."²⁴

The impact of reflexivity upon security both conceptually, and at the level of institutions and practices where security is achieved (or compromised) is predictably more difficult to specify than for the archetypal modern individual. This is the case for a number of reasons. As a theoretical model, the explanatory power of a risk society is diagnostic rather than projective. It is attuned to the uncertain, unknown, unpredictable and unintended, challenging established concepts and assumptions rather than offering straightforward alternatives or replacements for existing strategies and solutions. In consequence, the effect of reflexivity upon security is, potentially at

²¹ See, e.g., Beck, *Risk Society: Towards a New Modernity*, pp. 183-235; Beck, *World Risk Society*, pp. 19-47; Beck, "Living Your Own Life in a Runaway World: Individualisation, Globalisation and Politics," pp. 48-71.

²² Beck, *World Risk Society*, p. 119.

²³ See Alasdair MacIntyre, *Against the Self-Images of the Age: Essays on Ideology and Philosophy* (Duckworth, 1971).

²⁴ See Beck, "Living Your Own Life in a Runaway World: Individualisation, Globalisation and Politics."

least, an unwelcome compounding of uncertainties. In addition, institutional structures – which unsurprisingly remain based around the nation-state – and the cultures that they manifest are inevitably complex, intractable and often resistant to change. The notion of ‘reflexive security’ has not been explicitly adopted by Ulrich Beck, whose treatment of insecurity is primarily conducted within a broad analysis of the requirement for a cosmopolitan politics in an era of global interdependency and exposure to catastrophic risk,²⁵ but has influenced theorists attempting to develop models of security and risk by incorporating elements drawn from risk society. As with human security, the articulation of a reflexive counterpart is an ambitious enterprise. The following section briefly examines leading approaches to this task, arguing that just as the critical development of human security demands the incorporation of risk in its contemporary forms, so a reflexive model of security studies must also acknowledge and integrate the purposes and possibilities of human security if it is to receive a distinct and conceptually self-sufficient formulation.

NATO and Human Security

Following Beck, Mikkel Vedby Rasmussen interprets reflexivity as “characterised by a loss of control,”²⁶ arguing that in its orientation towards security as a set of challenges and risks “NATO has come to understand itself as a rule-altering institution”²⁷ with a primary role to intervene and regulate, through its decision-making processes, the definition and regulation of risks. This is achieved through the fostering of a constructivist politics organised around three categories drawn from the risk society: the management of European security by institutional enlargement, which “makes NATO reflect not only on the nature of the Alliance but also on the characteristics of Western Society”;²⁸ a focus on the future in a period of globalizing transformation and proliferating threats; and an attendance to the unintended consequences or ‘boomerang effects’ where even an ostensibly successful security intervention such as the mission in Kosovo generates new insecurities and problems in, for example, the stabilisation of relations with Serbia and the surrounding former Yugoslav republics. This analysis insightfully identifies the development of a reflexive rationality coinciding with a “broadening of the concept of security” that places NATO “at the centre of a cobweb of security issues, interests and institutions.”²⁹ The reflexivity identified here is strategic and political in its conception of security, however, and remains oriented around the prerogatives and transformations of military technology and physical force³⁰ rather than alternative approaches to securitisation implied by the recognition of a broader conceptual formation.

²⁵ Ulrich Beck, *Power in the Global Age* (Polity Press, 2005), pp. 280-310; Ulrich Beck and Ciaran Cronin, *The Cosmopolitan Vision* (Polity Press, 2006), pp. 130-162.

²⁶ Rasmussen, “Reflexive Security: NATO and International Risk Society,” p. 294.

²⁷ *Ibid.*, p. 298.

²⁸ *Ibid.*, p. 301.

²⁹ *Ibid.*, p. 307.

³⁰ See Mikkel V. Rasmussen, *The Risk Society at War: Terror, Technology and Strategy in the Twenty-First Century* (Cambridge University Press, 2007).

Like Rasmussen, Christopher Coker interprets NATO transition from a security community to a risk community as a response to globalization where “security can no longer be tied to states or state sovereignty...anything that increases personal insecurity... must now be taken into account by governments.”³¹ This expanded formulation retains in its reference to the role of government, and in the emphasis placed upon the pursuit of ‘collective security,’³² a primary role for the state as the foundational unit of analysis in the production of security. Within the military sphere upon which Coker’s analysis concentrates, distinct national interests are downplayed and NATO interpreted as a transnational entity predicated upon shared values and perceptions of risk and threat³³ through which “[r]isk increasingly determines the discourse of security” and security policy is “redefined ...in terms of the management of risks.”³⁴ This shift is reflected, for example, in the terms of reference guiding the reconstructive and developmental aspects of the KFOR³⁵ and ISAF³⁶ missions in Kosovo and Afghanistan. Although Coker’s treatment of human security as a stimulus to “preventive action to reduce the risk to human safety and to human lives” is brief,³⁷ the potential for NATO as a significant institution advancing the human security agenda is evident. Coker’s penetrating discussion of NATO and its role in relation to globalized risk concludes, however, that in this “world of uncertainties and risks the only option open to governments is to police the world.”³⁸

The attribution of global policing as a primary role places in question the extent to which human security can be reconciled or integrated with the tasks it confronts as a risk community. Moreover, the difficulties encountered by NATO in achieving force commitments from member states to the ISAF mission suggest the fragility of its transnational credentials,³⁹ indicating that as a community the level of convergence upon its defining norms and values is considerably less certain than Coker suggests.

These issues do not negate the acknowledgement and application of risk undertaken by NATO, but do provoke questions concerning its depth and impact. As depicted by Coker and Rasmussen, the incorporation of risk within the processes of strategy formation is primarily a matter of policy orientation that does not establish or define reflexive security in a substantive or operational manner. Furthermore, as the issue of fulfilment of commitments to the ISAF mission in Afghanistan demonstrates, the capacity of institutions founded on a set of enduring assumptions concerning security and the nation-state to respond and adapt to globalization remains, even within an explicitly multinational alliance such as NATO, is at present unproven. The litmus test in this

³¹ Coker, *Globalisation and Insecurity in the Twenty-first Century*, p. 34.

³² *Ibid.*, p. 37.

³³ *Ibid.*, pp. 73-74.

³⁴ Coker, *Globalisation and Insecurity in the Twenty-first Century*, pp. 64, 95.

³⁵ NATO, “NATO’s Role in Kosovo,” at http://www.nato.int/cps/en/SID-2AA54D1A-DAAB1F3C/natolive/topics_48818.htm (last visited, Nov. 26, 2013).

³⁶ NATO, “ISAF’s Mission in Afghanistan,” at http://www.nato.int/cps/en/SID-234ED659-9B4AABB7/natolive/topics_69366.htm (last visited Nov. 26, 2013).

³⁷ Coker, *Globalisation and Insecurity in the Twenty-first Century*, p. 23.

³⁸ *Ibid.*, p. 63.

³⁹ G. Harding, “Members’ Skirting Military Duty Irks NATO Leadership,” *The Washington Times*, February 13, 2007), p. A13.

respect may well be provided by Operation Moshtarak,⁴⁰ the counterinsurgency offensive launched by ISAF, in limited partnership with Afghan National Forces, during February 2010. This initiative, aiming to dislodge the Taliban from strongholds in the provinces of Helmand and Kandahar, is firstly notable in terms of size, being the largest single operation (involving over fifteen thousand personnel) since the initial movement into Afghanistan in late 2001. It also, more significantly still, marks an explicit shift in strategic communications and in operational integration. In the days preceding the initial stages of the operation, clear information as to both the content and purpose of Moshtarak was provided to local populations, emphasising that its target is limited to insurgent forces rather than wider communities, and that within its objectives the protection of civilians is accorded consistent priority. This information campaign – which provided prior warning of impending actions to potential insurgent targets, as well as to civilian non-combatants – had multiple effects. It did allow those associated with the Taleban and related networks to disperse, but in so doing the ground was at least partially cleared for an operation differing from its predecessors in critical respects. As well as clearing insurgents from specified territories, the objectives of Moshtarak hinged on holding and securing gains through the provision of stability, services and development over an extended – albeit uncertainly defined – period. It is notable that initial media assessments of the operation concentrated less on the elimination of insurgents or the extent of kinetic engagements, and more upon failures of civilian protection resulting from erroneous targeting and other forms of collateral damage. That protection was so readily established as the measure of success and failure evidences the extent to which the need to move beyond familiar clichés concerning ‘hearts and minds’ have been replaced by more concrete parameters and objectives.

Although neither ISAF, nor the fragile Afghan Government, has explicitly described Moshtarak as an endeavour that is explicitly organised around the concept of human security, its construction and ambitions are clearly consistent with both the responsibility to protect, and the wider framework of rights and entitlements associated with the conception. Writing during the earliest stages of the operation, it is not possible to venture an estimation of its success, and a full reckoning may be several years in the future. As an indication of the direction of strategic thinking within NATO and its constituent members, however, its very existence demonstrates a direction of travel that is very much to be welcomed and encouraged. The form of this encouragement should, at this stage, be directed towards the concepts of risk and reflexivity which, at present, relate to the discourse of human security in the form of a curious and as-yet incomplete symmetry. Just as the literature surrounding human security proceeds with little reference to developments in the study of risk, so the development of risk-based approaches neglects, other than in passing,⁴¹ human security and its significance. The corollary outcome is that just as the incorporation of risk supports the conceptual development and justification of human security, so an alternative interpretation of reflexivity that looks to human security for its agenda and which resists straightforward institutional

⁴⁰ ISAF Joint Command, “Operation Moshtarak,” (NATO News Release 2010-02-CA-059, Feb. 13, 2010), available at <http://www.isaf.nato.int/images/stories/File/2010-02-CA-059-Backgrounder-Operation%20Moshtarak.pdf> (last visited Nov. 26, 2013).

⁴¹ See, e.g. Coker, *Globalisation and Insecurity in the Twenty-first Century*, pp. 52-53.

definition is enabled – as evidenced in the formulation of Operation Moshtarak – within which the agenda established by human security provide a distinct and substantive set of issues that offer themselves as subject matter for reflexive analysis.

This approach in no way supplants or denies the significance of structures such as NATO, the United Nations and the European Union's Security and Defence Policy (ESDP), which can and often will act as vehicles for human security objectives. It does, however, inscribe at a conceptual level the independence of human security from any particular institutional or doctrinal form. In so doing the function of human security as a framework that informs and structures the activities and self-understandings of a potentially diverse array of bodies is enabled. The reflexive dimension within risk society, with its dual aspects of individual particularity and general universality, thereby places in question the meanings of security and the types of institutions, organizations, systems and responses that are required to achieve it.

The implications of this conceptual dependence are considerable, as the reframing of security incorporates as agents of human security organisations and activities that are not conventionally understood as such, as the activities of non-governmental organisations, charities, development agencies and analogous bodies becomes open to interpretation in relation to the core human security objectives, entitlements and threats identified by the UNDP: disease, hunger, unemployment, crime, social conflict, political repression, and environmental hazards. These domains are a starting point rather than a limit, and the view of human security as a global framework of risk management is constituted by a plurality of overlapping institutions and imperatives that function to place its meanings and limits in question – it is, in other words, reflexively contested. Human security thereby provides a framework within which the functions of bodies not conventionally understood as pursuing security objectives can be understood as vitally contributing to security in areas, for example, of food aid, education, health humanitarian assistance. Equally importantly, in challenging and extending the meanings of security, it offers an alternative role and set of possibilities for development to security and risk practitioners.

The growth in the wake of 9/11 of the private military (PMC) and private security (PSC) sectors has been extensive and rapid, prompting a range of concerns regarding the activities and accountability of a significant force commodified within a global security market based upon physical prevention and force, as well as concerns about the future of that market after the 'bubble' created by the war against terror and the invasion of Iraq bursts or subsides.⁴² Human security has the potential to explain and structure the constructive development of this sector, as fields of activity, in particular related to aid and development but by no means limited to these areas, become understood as being inextricably bound up with human security. The extension and application of the concept in this way thereby offers a revised rationale for the activities of PSCs and identifies a new field of research within which the activities of practitioners, along with participants within other areas of global civil society, can be investigated and interpreted from a perspective

⁴² See P.W. Singer, "Corporate Warriors," *International Security* 26(3) (2001), pp. 186-220; Dominick Donald, "After The Bubble: British Private Security Companies After Iraq" (Whitehall Paper 66, London, Royal United Services Institute, 2006), available at <http://www.rusi.org/publications/whitehall/ref:I44C63D079FF53/> (last visited Nov. 25, 2013).

encompassing security, rights, governance and development in an integrated and inclusive form appropriate to an era of globalization and complex interdependence. The possibilities enabled by this reframing of security are considerable, but the model inevitably contains its own risks and limitations which must be acknowledged and addressed.

Limits and Constraints of Human Security

The extension of human security within a conceptual framework that explains and sustains the development of security across a series of domains exceeding conventional notions of nation, state, interest and force is not a panacea for the resolution of the problems engendered by globalization, but it does offer a post-national adaptable framework within which issues relating to identity, resources, environment and, most fundamentally, survival can, perhaps, be better understood and constructively approached. This last point concerning survival, the most basic aspect of the responsibility to protect and the core of the human security mission as formulated by the United Nations, is a fundamental one that establishes the limits of human security. The universal and post-national elements are necessary parts of the task of rethinking security under conditions of globalization, but the absence of boundaries leaves the human security open to the charge that actions undertaken in its name are, potentially, unconstrained. That brings with it the danger of negative outcomes, side-effects and unintended consequences of a possibly catastrophic nature.

The recent history of interventions in Iraq is by no means an example of human security in practice, but does vividly instance both the dangers inherent in any policy of intervention. The overall course of the difficulties that followed the removal of Saddam Hussein's regime in Iraq are beyond the scope of this article, but thoroughly documented elsewhere.⁴³ It can be useful, however, to highlight the importance of particular view cases in order to identify and explore broader issues that present themselves in an otherwise daunting scale. In the case of Iraq, contributors to a telling 2006 documentary report compiled by Salam al-Janabi, better known as the 'Baghdad Blogger' Salam Pax, testified to the impact of the operation in the starkest personal terms. Within the feature Fawzia al-Attiya, a feminist campaigner and lecturer at Baghdad University, argued that despite the rhetoric of freedom and democracy surrounding the coalition intervention in Iraq: "We talk about human rights. There are no human rights. We live in extraordinary circumstances," whilst a common sentiment voiced by citizens struggling to survive in the city was that "any Iraqi on the street has to think that they could die at any moment..." and that "...there is nothing cheaper than Iraqi blood."⁴⁴

These remarks call attention to how life in such straightened circumstances becomes elemental. This does not in itself undermine human security. Indeed, the demonstration of the inadequacy of

⁴³ See, e.g. David L. Philips, David L., *Losing Iraq: Inside the Postwar Reconstruction Fiasco* (Basic Books, 2005); Thomas E. Ricks, *Fiasco: The American Military Adventure in Iraq* (Penguin, 2007).

⁴⁴ Salem Pax [Salam al-Janabi], "The Killing Fields," *BBC TV Newnight*, (10 July 2006), summary available at <http://news.bbc.co.uk/go/pr/fr/-/1/hi/programmes/newnight/5166292.stm> (last visited Nov. 25, 2013).

the mechanisms, institutions and failures of protection within the planning and conduct of that operation supports the need for an alternative, more disciplined and genuinely universal security framework. Such awareness is inherent in the reflexive questioning of security and its meanings that human security prioritises, but the movement from conceptual formation to practical achievement is a demanding and chastening one. Overconfidence, inattention or hubris can lead, as aspects of the case provided by Iraq demonstrate, to severely detrimental consequences. As Mark Duffield has extensively argued, the emergence of human security is typically depicted as a humanitarian development, but can also be interpreted as a “technology of international governance” which, in the aftermath of 9/11, has been marked by modes of intervention and reconstruction that “threatens to absorb development” within a formulation that “prioritises homeland livelihood systems and infrastructures” raising the as yet unanswered question of whether attempts to develop a “aid-based vision of cross-border alliances’ heralds ‘a new vision of human security, or...a global biopolitical tyranny?’⁴⁵

This polemical challenge is a significant one with a cautionary function. In tracing the emergence and effects of the UN model of human security, Duffield’s account of the concept does not incorporate the considerations of risk and reflexivity introduced here through the work of Ulrich Beck. This absence nevertheless highlights the importance of critical scrutiny, and the reflexive ethos that animates it, in order to ensure a level of precautionary awareness and attention to the responsibility to protect that would otherwise – as so often has been the case in both the recent and the distant past - be lacking.

Concluding Remarks: Homeland and Human Security

Human security is a significant innovation offering a framework for the interpretation of threats to security in a global environment that is increasingly complex, demanding and uncertain. Its conceptual formulation is not opposed to homeland security, which is certain to endure as both a conception and institutional form in many guises. The exclusive, and exclusionary, connotations bound up with the idea of the homeland as a privileged site of security inevitably, however, impose limits upon homeland security as a basis for counterterrorism and counterinsurgency at the strategic, tactical and practical levels. These limits, and the consequences to which they can contribute, are readily observable in the conduct and outcomes of war against terror to date. If it is to achieve a sufficiently distinct formulation, however, it must be located in the contexts of risk and modernization identified by Beck. Equally, if reflexivity, the critical ethos that places security in question, and constantly under scrutiny in terms of the responsibility to protect and the challenges that enjoins – which cannot be simply grafted onto existing structures and institutions – is to be effective both as method of analysis and stimulus to development in the interpretation and pursuit of security, it is in human security that its agenda is to be found. The productive dependency between these two initiatives is therefore clear.

⁴⁵ See Mark Duffield, *Global Governance and the New Wars* (Zed Books, 2001); Mark Duffield, “Human Security: Linking Development and Security in an Age of Terror”, in *New Interfaces Between Security and Development: Changing Concepts and Applications*. (Stephan Klingebiel, ed., Deutsches Institut für Entwicklungspolitik, 2006), pp. 13,14, 33, available at [http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/\(ynDK_contentByKey\)/ENTR-7BMH3S/\\$FILE/Studies%2013.pdf](http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/(ynDK_contentByKey)/ENTR-7BMH3S/$FILE/Studies%2013.pdf) (last visited Nov. 25, 2013).

Less obvious, at first glance, is the contribution of the critical *coda* presented in Duffield's identification of human security as a potentially tyrannical development. Although polemically presented, the chastening function of the charge that 'human' theorisations of security, no less than any other variant of the concept, are prone to distortion into forms of domination should not be downplayed. In constantly recalling the origin and ultimate subject of security – the regulation, organization and protection of elemental life – Duffield's critique need not be understood as a wholly negative analysis or counsel of despair. Rather, confronted by unprecedented global concentrations and coordination of power, interpreted and applied in keeping with the ethos of reflexivity highlighted in this discussion, it is a critique that functions to discipline and focus the ends as well as the means of human security, underlining the demands attending the responsibility to protect in all of its myriad, and unpredictable forms. Understood within this context, it contributes to an agenda for human security, advancing a framework of analysis and development that is attuned to its own paradoxes, limits and consequences, and attentive to the searching but easily overlooked burdens and obligations that security enjoins.

Dialogue concerning security concepts and the discourses that surround them can easily take on an air of abstraction that appears to separate debates from the operational realities that they seek to inform and shape. As the examples briefly introduced in the course of this discussion demonstrate, however, concepts and practice are more closely aligned than first appearances sometimes suggest. The formulation of Operation Moshtarak in a conceptual vocabulary that is consistent with that of human security marks a significant development in its own particular right, and a signpost to the future in terms of NATO's guiding strategic concept, which is currently the subject of consultations and open debate leading up to formal negotiations amongst member states, and a reformulation of the organisation's guiding doctrine that will commemorate its sixtieth year. The outcome of this deliberative process, to be finalised at the Lisbon Conference scheduled for late 2010, remains to be determined. Options for change under consideration emphasise emerging global factors associated with both countering terrorism and promoting human security in non-state contexts and environments of fragility and instability,⁴⁶ with the guidance offered by the Secretary General in March 2009 offering a clear indication of the understandings towards which current debates are progressing:

In an age marked by globalisation, our ability to shape our environment will diminish... Many challenges will not lend themselves to purely military solutions...and while some challenges may require instant, perhaps even preventive action, others will require long-term, costly and risky engagement far away from our own borders...when we go beyond the NATO's core business of collective defence, solidarity needs to be generated case-by-case, and then carefully sustained...in essence, we need to come to a new understanding about the meaning of shared security.⁴⁷

⁴⁶ See Christopher S. Chivvis, "Recasting NATO's Strategic Concept: Possible Directions for the United States" (RAND Occasional Paper No. 280. RAND, 2009), available at http://www.rand.org/pubs/occasional_papers/2009/RAND_OP280.pdf (last visited Nov. 26, 2013).

⁴⁷ Jaap de Hoop Scheffer, "The Future of NATO," (Speech at GMF Brussels Forum, March 22, 2009).

The Secretary-General's remarks here are not of course definitive, but strongly suggest that final form taken by the reformulated strategic concept will describe a transition away from the focus in the past upon national security, and the collective bargaining that constructed the interests of constituent members predominantly in terms of their respective homelands. The new understanding of shared security towards which his comments gesture may not come to be explicitly labelled as such, but insofar as it thoroughly responds to the proliferating and unpredictable challenges of a globalised security environment, including but by no means limited to those posed by terrorism and insurgency, its formulation will embrace the themes and priorities highlighted in discourses of human security and global risk.

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The European Union and Weapons of Mass Destruction Terrorism

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Abstract: *Weapons of mass destruction (WMD) are defined by the European Union (EU) as “potentially the greatest threat” to European security. Their acquisition by terrorists is particularly named as the “most frightening scenario” in the European Security Strategy. This article analyses the EU’s policy on WMD terrorism by looking at its non-proliferation efforts with a view to portraying their impact on counterterrorism. Rather than designing specific ways to address WMD terrorism, the EU attempts to tackle this issue as part of its non-proliferation policies. This is why the EU’s policy on WMD terrorism remains rather limited and declaratory. The EU encounters problems in conducting an effective policy of non-proliferation mainly because it is not a unitary actor. This surely affects the EU’s counter-WMD terrorism efforts and relationship with its partners such as the US and NATO. This article concludes that the EU should achieve coherence in its policies and design new ways for dealing with WMD terrorism.*

Keywords: *European Union, Weapons of Mass Destruction terrorism, Non-Proliferation, counterterrorism, Chemical Biological Radiological and Nuclear (CBRN) terrorism*

Introduction

WMD terrorism has found a place in the European Union's non-proliferation agenda, especially after the September 11 events, although it was initially considered within the framework of showing solidarity with the United States. However, the subsequent terrorist attacks in Madrid (March 11, 2004) and London (July 7, 2005) made the Europeans see the extent of the terrorist threat themselves and urged them to consider it with all dimensions, including the possibility of terrorists' acquisition of WMD.

This article analyses the EU's policy on WMD terrorism.¹ It argues that the EU's stance against WMD terrorism remains rather declaratory and limited because of the EU's preference for dealing with this issue mainly through the broader framework of its non-proliferation policy which prioritizes supporting international non-proliferation treaties and regimes. There has been a continuous lack of coherence in its non-proliferation policy. This also affects its stance on WMD terrorism.

The European Union (EU) is not a unitary² actor and this affects its foreign and security policy, limiting the EU's ability to act in a coherent way. The EU is composed of 28 Member States. These states naturally have different national interests, policies and security cultures. These differences make it harder for the Member States to agree on a common stance on some sensitive issue areas. The EU's complex institutional structure and inter-institutional rivalries also limit its foreign policy actions. This is mainly because European foreign policy is a multi-actor and multi-level policy, and, different actors involved in this policy realm usually have overlapping competences which lead to tensions between them. Constituting one part of European foreign and security policy, the EU's non-proliferation efforts also remain constrained due to these problems. This inevitably affects the EU's policy to prevent terrorist groups from acquiring WMD. The policy usually remains at the declaratory level, where the EU issues various statements, strategies, reports and action plans on the threat of terrorist groups' acquisition of WMD, without adequately addressing the question of how to prevent such a development in practice.

In order to support its argument, this article provides an overview of the EU's non-proliferation policy first. Then, it looks into the EU's emphasis on WMD terrorism and its efforts in this regard. It concludes that political will on the part of Member States and institutional coherence is the key to making the EU's efforts against WMD terrorism more effective.

¹ It should be noted at this point that the EU does not prefer to name this issue area 'WMD terrorism' but rather prefers the term 'CBRN terrorism.' This is mainly because of the military connotation of 'WMD terrorism.' A military problem would also necessitate this be addressed with military measures. 'CBRN terrorism' on the other hand, does not have such a connotation and it can mainly be tackled through other means including police cooperation as well as non-proliferation. Therefore, the EU, reflecting its soft-power approach, prefers to use the term 'CBRN terrorism' over 'WMD terrorism.' This gives a clear idea of the EU's policy orientation in this regard. Nevertheless, this study deliberately uses the term 'WMD terrorism' to show how the EU uses a euphemism to name the threat. See more on this in note 54 below.

² On the EU's "non-unitary" nature, see Brian White, *Understanding European Foreign Policy* (Palgrave, Hampshire and New York, 2001), p. 24.

The EU's WMD Policy: An Overview

The EU's policy on non-proliferation dates back to the establishment of European Atomic Energy Community (EURATOM), in terms of peaceful uses of nuclear energy and nuclear safety standards. Its non-proliferation efforts took a different turn with the creation of European Political Cooperation (EPC) which was more interested in nuclear disarmament. Within the context of EPC,³ a Working Party on Non-Proliferation (CONOP) was established in 1981. This CONOP is still operational today.

The end of the Cold War surely affected the European Community's non-proliferation policies and the European Community (EC) increased its efforts at non-proliferation significantly. It issued the Dublin European Council Declaration on Nuclear Non-proliferation on 25-26 June 1990, and got actively involved in the preparation of the NPT Review Conference the same year.⁴ The Gulf War of 1991 also engendered concern in the EC and had a significant impact in the increase in its efforts. The EC played a significant role in the preparation of the United Nations Security Council (UNSC) Presidential Statement of 31 January 1992, which named the proliferation of all WMD as "a threat to international peace and security."⁵ With the adoption of the Maastricht Treaty, the EU began adopting common positions and joint actions in the realm of non-proliferation and export controls on dual use goods.⁶

The September 11 attacks of 2001 not only led to an increase in the EU's non-proliferation efforts but also added a dimension of terrorism to this policy realm. The proliferation of WMD had become all the more important due to the perceived threat that terrorists might acquire WMD. The first response to the September 11 attacks came with Operation Enduring Freedom, launched in Afghanistan and conducted mainly by the US and British forces to expel al-Qaeda from the country and to end the Taliban rule. Expelling al-Qaeda from Afghanistan has especially been important for

³ The EPC was an intergovernmental framework and the decisions taken in this realm were only politically binding. It gained treaty basis only with the Single European Act of 1986.

⁴ See Peter Van Ham, "The European Union's WMD Strategy and the CFSP: A Critical Analysis", *Non-Proliferation Papers* (EU Non-Proliferation Consortium, 2011), available at http://www.sipri.org/research/disarmament/eu-consortium/publications/publications/EUNPC_no%202.pdf (last visited Nov. 26, 2013), p. 1; Camille Grand, "The European Union and the Non-Proliferation of Nuclear Weapons" (Chaillot Papers, No. 37, Western European Union Institute for Security Studies, 2000), p. 10.

⁵ Frans A.M. Alting von Geusau, "Statement by the President of the UN Security Council" (31 January 1992), available at <http://www.fransamaltlingvongeusau.com/documents/dl1/h6/1.6.8.pdf> (last visited Nov. 27, 2013), p. 26.

⁶ For example, the EU was involved in the preparations for the NPT Review and Extension Conference of 1995 through the adoption of a joint action in July 1994. "Council Decision of 25 July 1994 Concerning the Joint Action Adopted by the Council on the Basis of Article J.3 of the Treaty on European Union Regarding Preparation for the 1995 Conference of the States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 94/509/CFSP", *Official Journal of the European Communities*, L 205/ 1, (25 July 1994), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1994:205:FULL:EN:PDF> (last visited Nov. 27, 2013). Since then, EU has adopted several common positions to determine its involvement in the preparation of subsequent NPT Review Conferences.

preventing its attempt to access WMD for “mass casualty attacks.”⁷ Although the EU, as an organization, was not initially involved in the stabilization process of Afghanistan, some of its members contributed to Operation Enduring Freedom and the NATO International Security Assistance Force (ISAF) mission. In 2007 the EU launched its own police mission in the country, “with linkages to the wider rule of law and counternarcotics, to assist and enhance current efforts in the area of police reform at central and provincial levels.”⁸

The 2003 Iraq War, on the other hand, was important because the EU Member States could not agree on a common policy on the war. This division in the EU also strained relations with the US. Within such an internal and external context, the EU adopted the European Security Strategy (ESS) and named the key threats to European security.⁹ The Strategy also determined the policies and instruments for dealing with those threats. It listed terrorism, proliferation of WMD, regional conflicts, state failure and organized crime as the key threats to European security, naming WMD as “potentially the greatest threat” in this regard. Within this context, the ESS referred to the terrorist groups’ acquisition of WMD as “the most frightening scenario.”¹⁰

In 2003, the EU’s policy on non-proliferation was firmly established when documents entitled the Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction¹¹ and the Action Plan for the implementation of the Basic Principles¹² were issued in that year. The document on mainstreaming a WMD clause – as an essential element clause – in all mixed agreements

⁷ Rolf Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?* (Belfer Center for Science and International Affairs, 2010), available at <http://belfercenter.ksg.harvard.edu/files/al-qaeda-wmd-threat.pdf> (last visited Nov. 27, 2013), p. 5. In another article, Mowatt-Larssen states: “Nov. 7, 2001: Bin Laden states in an interview with Pakistani journalist Hamid Mir, ‘I wish to declare that if America used chemical or nuclear weapons against us, then we may retort with chemical and nuclear weapons. We have the weapons as a deterrent.’ In the same interview, Zawahiri states, ‘If you have \$30 million, go to the black market in central Asia, contact any disgruntled Soviet scientist, and a lot of dozens of smart briefcase bombs are available. They have contacted us, we sent our people to Moscow to Tashkent to other central Asian states, and they negotiated and we purchased some suitcase bombs.’” Rolf Mowatt-Larssen, “Al Qaeda’s Pursuit of Weapons of Mass Destruction – The Authoritative Timeline,” *Foreign Policy* (25 January 2010), available at http://www.foreignpolicy.com/articles/2010/01/25/al_qaedas_pursuit_of_weapons_of_mass_destruction#sthash.XnZdVRkq.dpbs (last visited Nov. 27, 2013).

⁸ “Council Joint Action 2007/369/CFSP of 30 May 2007 on Establishment of the European Union Police Mission in Afghanistan (EUPOL AFGANISTAN),” *Official Journal of the European Union*, L 139/33, 31 May 2007.

⁹ Spear contends that the EU’s “WMD policies were borne out of the EU’s disagreements over Iraq and were an attempt to ensure that such divisions did not happen again.” Joanna Spear, “The Emergence of a European ‘Strategic Personality,’” *Arms Control Today* (Arms Control Association, 2003), available at http://www.armscontrol.org/act/2003_11/Spear (last visited Nov. 27, 2013).

¹⁰ Council of the European Union, “A Secure Europe in A Better World – European Security Strategy” (12 December 2003), available at <http://ue.eu.int/uedocs/cmsUpload/78367.pdf> (last visited Nov. 27, 2013).

¹¹ European Union@United Nations, “Basic Principles for an EU Strategy against Proliferation of WMD,” at http://www.eu-un.europa.eu/articles/en/article_2478_en.htm (Last visit Nov. 27, 2013) (Provides Summary: June 24, 2003: Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction, presented to the GAERC on 16 June 2003 (Luxembourg), 24 June 2003).

¹² Council of the European Union, “Action Plan for the Implementation of the Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction,” Document 10354/1/03 (13 June 2003), available at <http://www.sussex.ac.uk/Units/spru/hsp/documents/2003-0616%20Action%20plan.pdf> (last visited Nov. 27, 2013).

that the EU would sign with third countries was also accepted in November 2003.¹³ Finally, on December 9, 2003, the Council adopted an EU strategy against the proliferation of weapons of mass destruction.¹⁴ Upon the adoption of this strategy, the Council bodies started to issue regular semi-annual progress reports. These documents have been crucial in the sense that they evaluated the implementation of the WMD Strategy and suggested ways to improve it. In December 2006, a concept paper on Monitoring and Enhancing Consistent Implementation¹⁵ of the EU's WMD Strategy was also adopted. A WMD Monitoring Centre was also established in 2007, as suggested in this document.

A Report on the Implementation of the European Security Strategy was issued in December 2008 and it drew attention to an increased risk of WMD. It especially referred to nuclear programs of Iran and North Korea. The document entitled *New Lines for Action by the European Union in Combating the Proliferation of Weapons of Mass Destruction and Their Delivery Systems* was also adopted in the same year.¹⁶ In December 2009, the European Council adopted a statement on tighter international security and called for a negotiated solution to the Iranian nuclear issue.¹⁷ The statement on tighter international security further asked for "resolute operational cooperation to obstruct illicit transfers, control exports even more effectively, counter illegal networks, take punitive action against proliferation financing and reduce the risk of a link-up between terrorism and weapons of mass destruction".¹⁸ In July 2010, the European Council also endorsed the establishment of a European network of independent non-proliferation think tanks.¹⁹

Today, the EU financially supports various WMD agencies and regimes, helping them strengthen their capabilities to monitor and verify suspected WMD activities. It contributes to the IAEA's Nuclear Security Fund. It has established CBRN Centres of Excellence in various regions

¹³ Council of the European Union, "Fight against the Proliferation of Weapons of Mass Destruction - Mainstreaming Non-proliferation Policies into the EU's Wider Relations with Third Countries," Document 14997/03 (19 November 2003), available at <http://ue.eu.int/uedocs/cmsUpload/st14997.en03.pdf> (last visited Nov. 27, 2013). Note that it was in 2002 that the EU had started to include a terrorism clause in its mixed agreements with third countries.

¹⁴ Council of the European Union, "Fight against the Proliferation of Weapons of Mass Destruction - EU Strategy against Proliferation of Weapons of Mass Destruction," Document 15708/03 (10 December 2003), available at <http://register.consilium.europa.eu/pdf/en/03/st15/st15708.en03.pdf> (last visited Nov. 27, 2013).

¹⁵ Council of the European Union, "EU Strategy against the Proliferation of WMD: Monitoring and Enhancing Consistent Implementation," Document 16694/06 (12 December 2006), available at <http://register.consilium.europa.eu/pdf/en/06/st16/st16694.en06.pdf> (last visited Nov. 27, 2013).

¹⁶ Council of the European Union, "Council Conclusions and New Lines for Action by the European Union in Combating the Proliferation of Weapons of Mass Destruction and Their Delivery Systems," Document 17172/08 (17 December 2008), available at <http://register.consilium.europa.eu/pdf/en/08/st17/st17172.en08.pdf> (last visited Nov. 27, 2013).

¹⁷ Council of the European Union, "Statement on Tighter International Security," Document 16751/08 (3 December 2008), available at <http://register.consilium.europa.eu/pdf/en/08/st16/st16751.en08.pdf> (last visited Nov. 27, 2013). Please note that EU policy on Iran's nuclear programme goes beyond the scope of this paper and is only mentioned when necessary for explaining the EU's general approach to WMD.

¹⁸ *Ibid.*

¹⁹ "Council Decision 2010/430/CFSP of 26 July 2010 Establishing a European Network of Independent Non-proliferation Think Tanks in Support of the Implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction," *Official Journal of the European Union*, L 202/5 (4 August 2010), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:202:0005:0009:EN:PDF> (last visited Nov. 27, 2013).

of the world. It has also actively participated in the preparation of quadriannual NPT review conferences. It has further contributed to non-proliferation activities in several countries, especially Russia and the former Soviet states by providing financial aid and technical support.

The EU held a Non-Proliferation and Disarmament Conference in February 2012. It also became actively involved in the preparations for the Seoul Nuclear Security Summit in March 2012. Moreover, it participated in the NPT Preparatory Committee (PrepCom) meeting held in Vienna on 30 April – 11 May 2012.

As this overview reflects, the EU has actually produced significant policy output in the realm of WMD non-proliferation. Nevertheless, its international impact in this realm is still limited. Furthermore, the possibility of terrorist groups' acquisition of WMD has not come to the fore as a prominent threat - to be tackled with immediately - in the EU's non-proliferation agenda, although it was named as "the most frightening scenario" in the ESS. The reasons of this are explained in the next section.

The EU's Policy for Addressing WMD Terrorism

After the September 11 attacks, on September 21, 2001, the European Council held an extraordinary meeting and declared: "terrorism is a real challenge to the world and to Europe" and "the fight against terrorism will, more than ever, be a priority objective of the European Union."²⁰ On December 10, 2001, the General Affairs Council referred to the implications of the terrorist threat for the EU's policies, stating that "[non-proliferation, disarmament and arms control] can [...] make an essential contribution in the global fight against terrorism by reducing the risk of non-state actors gaining access to weapons of mass destruction, radioactive materials and means of delivery as well as by preventing the spread of conventional weapons."²¹ The Council declared:

The elimination, reduction or control of certain weapons, their means of delivery and relevant materials according to the relevant bilateral and multilateral instruments as well as national initiatives enforcing this goal, together with their effective national implementation significantly reduces the risk of proliferation to non-state actors. Furthermore, multilateral instruments and regimes for disarmament, arms control and non-proliferation as well as national initiatives enforcing this goal foster confidence between States and enhance security. They thereby contribute to the building and strengthening of the international coalition against terrorism.²²

The Council also agreed "to launch a targeted initiative to respond effectively to the international threat of terrorism" through non-proliferation, disarmament and arms control,

²⁰ Council of the European Union, "Conclusions and Plan of Action of the Extraordinary European Council Meeting on 21 September 2001," Document SN140/01 (21 September 2001), available at http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/140.en.pdf (last visited Nov. 27, 2013).

²¹ Council of the European Union, 2397th Council meeting - GENERAL AFFAIRS (10 December 2001), *Official Journal of the European Union* C/01/460n (10 December 2001), available at http://europa.eu/rapid/press-release_PRES-01-460_en.htm (last visited Nov. 27, 2013).

²² *Ibid.*

employing multilateral instruments, export controls, international co-operation and political dialogue with third countries.²³ It stipulated: “the EU should focus on concrete measures to strengthen export controls to prevent terrorist groups and States which harbour them from acquiring materials relative to weapons of mass destruction.”²⁴ The Council also “emphasised the importance of protection and assistance against the use or threat of chemical and biological weapons as well as measures to maintain physical control of nuclear material world-wide.”²⁵ The General Affairs Council declaration shows that the EU has aimed at addressing the threat of WMD terrorism mainly through its non-proliferation policies rather than through designing new procedures, processes and instruments to deal with this threat directly. For example, the Council Common Position of 27 December 2001 on combating terrorism only emphasized “the threat posed by the possession of weapons of mass destruction by terrorist groups”²⁶ but did not mention the ways to deal with this threat.

As mentioned above, 2003 was a significant year for the EU’s security policies because both the ESS and the WMD Strategy were issued in the same year, together with many other documents. As the ESS has already been mentioned above, it might be useful to have a look at the EU WMD Strategy here. Roland Kobia contends that the WMD Strategy “is linked to the post-September 11 fight against terrorism and to the various international obligations stemming from different instruments.”²⁷ The Strategy defines the proliferation of WMD as “a global threat, which requires a global approach.”²⁸ In this regard, it refers to use by states, which “have sought or are seeking to develop” WMD, and, the acquisition of “chemical, biological, radiological or fissile materials and their means of delivery” by terrorist groups “who could conduct actions aimed at causing large-scale death and destruction.”²⁹

The Strategy refers to the WMD terrorism as follows:

²³ Ibid.

²⁴ Ibid. The second part of this statement is especially crucial as it shows that the EU also had views parallel to those of the US on the threat posed by states which harbour terrorists and how they may help them access WMD. This explains the Europeans’ initial support for Operation Enduring Freedom and ISAF. Nevertheless, the EU’s policy on Afghanistan remained limited to humanitarian and development aid and counternarcotics support without any focus on countering WMD terrorism. The EU stance – non-stance – on the Iraq war, on the other hand, clearly diverted from its solidarity with and unconditional support to the US in its war against terrorism.

²⁵ Ibid.

²⁶ “Council Common Position of 27 December 2001 on Combating Terrorism”, *Official Journal of the European Union*, L 344 (28 December 2001), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:344:0090:0092:EN:PDF> (last visited Nov. 27, 2013).

²⁷ Roland Kobia, “The EU and Non-Proliferation: Need for a Quantum Leap?” *Nuclear Law Bulletin* 81, (OECD Nuclear Energy Agency (NEA), 2008), available at http://www.oecd-nea.org/law/nlbr/documents/031_053_ArticleKobiaRoland.pdf (last visited Nov. 27, 2013), p. 47.

²⁸ Council of the European Union, “Fight against the Proliferation of Weapons of Mass Destruction- EU Strategy against Proliferation of Weapons of Mass Destruction.”

²⁹ Ibid. Note that Alvarez-Verdugo contends: “According to [EU] analysis, the connection between WMD and terrorist groups is particularly strong in terms of chemical and biological weapons because their specific characteristics make them especially attractive to terrorists.” Milagros Alvarez-Verdugo, “Comparing U.S. and E.U. Strategies against Weapons of Mass Destruction: Some Legal Consequences,” *Annual Survey of International and Comparative Law* 11 (1) (2005), p. 124 (footnote 14).

A WMD attack on the EU's territory would involve the risk of disruption on a massive scale, in addition to grave immediate consequences in terms of destruction and casualties. In particular, the possibility of WMD being used by terrorists present[s] a direct and growing threat to our societies in this respect.

[...] In areas of tension where there are WMD programmes, European interests are potentially under threat, either through conventional conflicts between States or through terrorist attacks. In those regions, expatriate communities, stationed and deployed troops (bases or external operations), and economic interests (natural resources, investments, export markets) can be affected, whether or not specially targeted.³⁰

The Strategy sees “an integrated” approach as a must in dealing with the WMD threat and sets “effective multilateralism, prevention and international cooperation”³¹ as the major principles in addressing this threat. “Non-proliferation, disarmament, arms control”³² are seen as the major ways to contribute to “the global fight against terrorism by reducing the risk of non state actors gaining access to weapons of mass destruction, radioactive materials and means of delivery.”³³ The Strategy stipulates that a stable international and regional environment is a must in fighting the proliferation of WMD. It also refers to the US, Russia, Canada, Japan, NATO and the UN as the key partners. On the other hand, it names the Mediterranean as a problematic region.

The EU's WMD Strategy further defines the instruments to deal with the proliferation threat as “multilateral treaties and verification mechanisms, national and internationally-coordinated export controls, cooperative threat reduction programmes, political and economic levers (including trade and development policies), interdiction of illegal procurement activities and coercive measures.”³⁴ It also underlines the importance of providing financial support to multilateral non-proliferation regimes and “strengthening export control policies and practices in co-ordination with partners of the export control regimes.”³⁵ As the major lines set by the EU's WMD Strategy reflect, the EU does not offer specific tools for dealing with the threat of WMD terrorism. Rather, it evaluates the response to such threats within its overall approach to non-proliferation.

Because of the Madrid and London bombings, the EU stepped up its efforts to combat terrorism. After the Madrid attacks, in March 2004, the European Council made a Declaration on Combating

³⁰ Council of the European Union, “Fight against the Proliferation of Weapons of Mass Destruction - EU Strategy against Proliferation of Weapons of Mass Destruction.”

³¹ Ibid.

³² On this, see also Council of the European Union, *The European Union Strategy against the Proliferation of Weapons of Mass Destruction – Effective Multilateralism, Prevention and International Cooperation* (2008), available at http://www.consilium.europa.eu/uedocs/cmsUpload/EN%20prolif_int%202008.pdf (last visited Nov. 27, 2013).

³³ Council of the European Union, “Fight against the Proliferation of Weapons of Mass Destruction- EU Strategy against Proliferation of Weapons of Mass Destruction.”

³⁴ Ibid.

³⁵ Ibid.

Terrorism³⁶ and appointed a counterterrorism coordinator. In the Declaration, the European Council endorsed a revised plan of action on the EU's Strategic Objectives to combat terrorism and named one of those objectives as: "Work to ensure universal adherence to, and full implementation of, the United Nations Conventions on Terrorism, and to agree a Comprehensive UN Convention against Terrorism and agree a comprehensive UN Convention on the Suppression of Acts of Nuclear Terrorism."³⁷ The Declaration also referred to the need for strengthening the Member States' "capacity to alleviate the consequences of attacks on the civilian population, including in the areas of health security and civil protection, building on existing EU Health Security and CBRN programmes."³⁸

In line with this Declaration, the new EU Plan of Action on Combating Terrorism was adopted in June 2004.³⁹ This document listed seven new objectives in combating terrorism. Nevertheless, taking measures against WMD terrorism was not among those strategies. Rather, the document only reiterated those statements on the CBRN threat in the Declaration on Combating Terrorism and UN Convention on the Suppression of Acts of Nuclear Terrorism. Since 2004, the action plan has regularly been reviewed and revised through reports on its implementation. Nevertheless, these series of reports did not also introduce new and specific mechanisms in combating WMD terrorism. Furthermore, the action plan and its subsequent revisions themselves were criticised by many as an ineffective declaratory exercise which lacked implementation at the Member State and EU levels.⁴⁰

After the London attacks, the EU adopted a Counter-Terrorism Strategy in December 2005, establishing four basic principles: prevent, protect, pursue and respond.⁴¹ In this document there were only two open references to WMD terrorism. The first one was under the principle of protect, by mentioning the need for international cooperation in non-proliferation of CBRN materials and providing "technical assistance on protective security to priority third countries" in this regard.⁴² The second one was under the principle of pursue, where tackling "terrorist access to weapons and explosives, ranging from components for homemade explosive to CBRN material" was named as a key priority.⁴³ The Counter-Terrorism Strategy also fell short of determining specific ways in countering WMD terrorism and only underlined the need for tackling this threat.

³⁶ European Council, "Declaration on Combating Terrorism" (25 March 2004), available at <http://www.consilium.europa.eu/uedocs/cmsUpload/DECL-25.3.pdf> (last visited Nov. 27, 2013).

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ Council of the European Union, "EU Plan of Action on Combating Terrorism," Document 10586/04 (15 June 2004), available at <http://register.consilium.europa.eu/pdf/en/04/st10/st10586.en04.pdf> (last visited Nov. 27, 2013).

⁴⁰ Bossong argues: "Over the long term, EU Action Plan on Combating Terrorism has not strengthened the credibility of the EU's counter-terrorism effort, even though the EU has agreed on an impressive or – depending on one's perspective – worrying array of new measures since 9/11. Initially, the Action Plan seemed a useful response to the terrorist attacks. However, a closer analysis of the presuppositions and origins of the Action Plan have shown that it could not serve as an effective instrument of EU security governance." Raphael Bossong, "The Action Plan on Combating Terrorism: A Flawed Instrument of EU Security Governance," *Journal of Common Market Studies* 46(1) (2008), p. 42.

⁴¹ Council of the European Union, "The European Union Counter-Terrorism Strategy," Document 14469/4/05 (30 November 2005), available at <http://register.consilium.eu.int/pdf/en/05/st14/st14469-re04.en05.pdf> (last visited Nov. 27, 2013).

⁴² *Ibid.*

⁴³ *Ibid.*

The Concept Paper on EU Strategy against the Proliferation of WMD: Monitoring and Enhancing Consistent Implementation, issued in December 2006, referred to the growing threat of proliferation to non-state actors after the terrorist attacks in Madrid and London.⁴⁴ This Concept Paper stipulated that these attacks “underscore[d] the new challenges concerning non-state actors, the imperative to prevent terrorists from acquiring WMD or related materials and therefore the critical importance to step up efforts to implement the EU WMD Strategy.”⁴⁵ It further stated: “The risk that this threat may well one day or another materialise in Europe or elsewhere is real and has to be taken into account by decision-makers in the EU.”⁴⁶

In its meeting held in November 2007, the Justice and Home Affairs Council adopted the Council Conclusions on Addressing Chemical, Biological, Radiological and Nuclear Risks and on Bio-preparedness. The document underlined “the importance of improving and interlinking the mechanisms for the detection and identification of terrorist threats and for alerting the professionals and the public.”⁴⁷ The document further stipulated that as the EU “takes forward its work on developing a comprehensive approach to the security enhancement of explosives, detonators, precursors and related technologies, it must continue addressing with equal determination the non-conventional risks, in particular those posed by Chemical, Biological, Radiological and Nuclear substances, including those related to their potential terrorist use, as recognized and addressed by the EU Strategies on counter-terrorism and against the proliferation of WMD.”⁴⁸ It also tasked “the Counter-Terrorism Coordinator and the SG/HR’s Personal Representative for non-proliferation to work together and with Member States and the Commission, in accordance with their respective competences, with a view to identifying ways and means to mitigate the risk that terrorists might in the future obtain, directly or indirectly, CBRN materials.”⁴⁹

The New Lines for Action by the European Union in Combating the Proliferation of Weapons of Mass Destruction and Their Delivery Systems, adopted in 2008, on the other hand, was “designed to increase the effectiveness and impact of the EU’s approach to non-proliferation, and make it more operational.”⁵⁰ This document also drew attention to the threat of terrorists’ acquisition of WMD, calling it “one of the greatest security challenges which Europeans may ever face.”⁵¹ Therefore, it stipulated: “We must accord the highest priority to protecting European citizens and our friends and allies against the existing and growing risk presented by the proliferation of such

⁴⁴ Council of the European Union, “EU Strategy against the Proliferation of WMD: Monitoring and Enhancing Consistent Implementation.”

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ Council of the European Union, “Council Conclusions of 6 December 2007 on Addressing Chemical, Biological, Radiological and Nuclear Risks and on Bio-preparedness,” Document 16589/07 (17 December 2007), available at <http://register.consilium.europa.eu/pdf/en/07/st16/st16589.en07.pdf> (last visited Nov. 27, 2013).

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ European External Action Service, “The Fight against Proliferation of WMD,” at http://eeas.europa.eu/non-proliferation-and-disarmament/wmd/index_en.htm (accessed on 1 December 2012).

⁵¹ Council of the European Union, “Council Conclusions and New Lines for action by the European Union in Combating the Proliferation of Weapons of Mass Destruction and Their Delivery Systems.”

weapons.”⁵² Nevertheless, this document also did not specify any action solely designed for countering WMD terrorism.

In 2009, the Commission issued the Communication from the Commission to the European Parliament and the Council on Strengthening Chemical, Biological, Radiological and Nuclear Security in the European Union – an EU CBRN Action Plan which directly addressed the problem of CBRN terrorism.⁵³ This communication (EU CBRN Action Plan) was crucial in the sense that it was the first document to detail how the EU should react to CBRN terrorism.⁵⁴ The Commission proposed “an all-hazards approach” – “with a strong emphasis on countering the terrorist threat, in particular with regard to preventive actions” – because “no matter whether a CBRN incident is accidental or intentional, man-made or not, the response in terms of civil protection and health is likely to be similar.”⁵⁵ The Action Plan determined the main areas of work to be prevention, detection, and preparedness and response.⁵⁶ It further emphasized “international cooperation, communication with the public, information tools, training, personnel security, research and criminalisation of CBRN acts” as “horizontal actions.”⁵⁷

With regard to prevention, the Action Plan drew attention to the need for “the prioritization of high-risk CBRN materials based on a thorough risk assessment.”⁵⁸ It stipulated that “subsequent actions” would “concentrate on the security of CBRN materials and facilities, control over CBRN materials, developing a high-security culture of staff, strengthening the identification of suspicious transactions and behaviours in relation to high-risk CBRN materials, improving the security of transport, information exchange, import and export regimes and strengthening cooperation on the security of nuclear materials.”⁵⁹

⁵² Ibid.

⁵³ Commission of the European Communities, “Communication from the Commission to the European Parliament and the Council on Strengthening Chemical, Biological, Radiological and Nuclear Security in the European Union – an EU CBRN Action Plan,” Document COM(2009) 273 Final (24 June 2009), available at http://ec.europa.eu/home-affairs/summary/docs/com_2009_0273_en.pdf (last visited Nov. 27, 2013). Note that the Council approved the EU CBRN Action Plan on 30 November 2009.

⁵⁴ Note that the Commission deliberately used the term ‘CBRN terrorism’ instead of the term ‘WMD terrorism’ in this document. This is mainly because the Commission takes ‘WMD terrorism’ as a term specific to a military context. It used the term ‘CBRN terrorism’ due to its preference for using “a rather broad description of the terrorist threat concerning CBRN materials: all uses of chemical, biological, radiological or nuclear substances and materials for terrorist purposes.” The Commission stated: “An approach which looks at all possible ways in which terrorists can use these materials is the only one acceptable from a point of view of prevention and detection, since all possible risks concerning these materials should be covered.” Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid.

For detection, the Commission proposed that “detection systems should be installed and used both at external [EU] borders and within each Member State.”⁶⁰ It also underlined the need for “developing minimum detection standards to be applied across the entire EU, establishing trialling, testing and certification schemes for CBRN detection and improving the exchange of good practices on the detection of CBRN materials.”⁶¹

In terms of preparedness and response, the Action Plan stipulated the strengthening of existing measures and paying more attention to CBRN emergency planning, strengthening countermeasure capacity, reinforcing information flows, developing better modelling tools and improving criminal investigation capacity. It should be noted at this point that although the number of declarations and strategies adopted on prevention usually come to the fore, more work has been done in terms of strengthening the EU’s response to possible CBRN attacks or disasters. In practice, therefore, measures taken for crisis response at the levels of the EU and the Member States, both, seem to surpass efforts to prevent. An important part of the work with regard to response is to be done by the Civil Protection Mechanism established in 2001, which is financed by the Civil Protection Financial Instrument set up in 2007.

As part of the efforts for implementing the CBRN action plan, in June 2011 the Council invited Member States, the Commission and Europol to establish a European network of specialised CBRN law enforcement units.⁶² This network would deal “with responses to possible terrorist attacks involving chemical, biological, radiological or nuclear materials.”⁶³ It was expected that the network would be used “to facilitate the exchange of information and good practices, organise joint training exercises and provide updates on the latest developments in this field, and thus enhance Member States’ capacity to respond to emergencies arising as a result of possible terrorist attacks involving CBRN materials.”⁶⁴

In December 2011, a few months after the tenth anniversary of the September 11 attacks, the EU adopted its regular report on the Action Plan on combating terrorism. This document took full account of what has been accomplished so far. The establishment of an Early Warning System (EWS) on Explosives, CBRN and Weapons and its extension to cover all Member States, the creation of a the EU European Bomb Data System (EBDS) – “a system for the storage and exchange of information on incidents related to explosives, improvised explosive devices (IEDs), improvised incendiary devices (IIDs) and CBRN substances” – and the establishment of the

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Council of the European Union, “Council Conclusions on the Creation of a European Network of Specialised CBRN Law Enforcement Units” – 3096th JUSTICE and HOME AFFAIRS Council meeting, (Luxembourg, 9 and 10 June 2011), available at

http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/122495.pdf (last visited Nov. 27, 2013). It should also be noted that the Commission also set up a CBRN Advisory Group to help the implementation of the Action Plan, in February 2010.

⁶³ Ibid.

⁶⁴ Ibid.

European Explosive Ordnance Disposal Network (EEODN) were listed as important developments under the principle of protect.⁶⁵ The Action Plan also suggested the merging of the EU CBRN Law Enforcement Network within the EEODN. The Action Plan also outlined the Europol and Eurojust activities on CBRN terrorism.

Technical and Financial Tools Employed by the EU in Non-Proliferation

The EU employs both the CFSP budget and financial instruments managed by the European Commission (Community instruments before the Lisbon Treaty) in dealing with non-proliferation. It supports international/multilateral non-proliferation regimes, treaties and bodies mainly through CFSP funds. Diplomatic efforts of the EU for non-proliferation as well as its contribution to various international conferences including the NPT review conferences are also funded from the CFSP budget. The EU supports many non-proliferation regimes including but not limited to:

- The Non Proliferation Treaty (NPT) and its review conferences;
- the Chemical Weapons Convention (CWC) and the Organization for the Prohibition of Chemical Weapons;
- the Biological and Toxin Weapons Convention (BTWC);
- the IAEA;
- the Convention on the Physical Protection of Nuclear Material;
- the Nuclear Terrorism Convention;
- the Hague Code of Conduct against Ballistic Missile Proliferation; and
- the UNSC resolutions, especially UNSC Resolution 1540.⁶⁶

Financial instruments managed by the Commission are mainly used to provide technical and financial assistance to third countries – namely, the former Soviet republics and Russia as well as the Middle Eastern and African countries. These tools are employed especially in dealing with chemical, biological, radiological and nuclear (CBRN) risks and their acquisition and use by terrorists. The EU has also established regional CBRN Centres of Excellence in the Middle East, Africa, Central Asia, South Asia, the Caucasus, Ukraine and Moldova in order to counter the CBRN threat. The EU has also supported Russia (the International Science and Technology Centre in Moscow) and Ukraine (the Ukraine Science and Technology Centre) in the re-employment of former CBRN scientists.

⁶⁵ Council of the European Union, EU Action Plan on Combating Terrorism, Document 17594/1/11 (9 December 2011), available at <http://register.consilium.europa.eu/pdf/en/11/st17/st17594-re01.en11.pdf> (last visited Nov. 27, 2013). Note that all three instruments were foreseen in the EU Action Plan on Enhancing the Security of Explosives. See Council of the European Union, EU Action Plan on Enhancing the Security of Explosives, Document 8311/08 (11 April 2008) available at <http://register.consilium.europa.eu/pdf/en/08/st08/st08311.en08.pdf> (last visited Nov. 27, 2013).

⁶⁶ Note that the EU also supports these through the use of financial instruments managed by the Commission, in terms of their technical dimensions and especially in terms of CBRN and nuclear safety projects.

The major financial instruments to fund CBRN projects are managed by the Commission – former Community instruments: the Instrument for Stability (IfS) and the Instrument for Nuclear Safety Cooperation (INSC). The non-proliferation efforts of former Soviet countries and Russia⁶⁷ – as well as those countries in Africa, the Middle East, Asia-Pacific, and the Balkans – are also financed through the IfS.⁶⁸ The INSC, which aims to contribute to “nuclear safety, radiation protection and effective nuclear safeguards globally,” was established in February 2007 by a Council Regulation.⁶⁹ The INSC supports various projects such as the Chernobyl project.⁷⁰

There is also another financial tool employed by the Commission: the Civil Protection Financial Instrument, but it only provides funding for preparedness for post-attack/disaster situations, in support of civil protection. This instrument is scheduled to be used only until the end of 2013.

The employment of CFSP and financial mechanisms under the Commission’s management, used for funding the EU’s non-proliferation policies, has inevitably led to institutional overlaps. These overlaps have caused consistency problems as well as turf battles. Nevertheless, with the creation of the European External Action Service, which is responsible for assisting the High Representative in coordinating the EU’s non-proliferation policy, these problems are expected to decrease in the future.

Challenges to the EU’s Counter-WMD Terrorism Efforts

The major challenge to the EU’s non-proliferation and counterterrorism efforts is its “non-unitary”⁷¹ nature. Overlaps in various institutional competences, as well as different interests and security cultures of Member States, limit the EU’s ability to deal with WMD terrorism effectively. This is also the major reason why the policy mostly remains at the declaratory level.

⁶⁷ It should be noted that the non-proliferation projects of the former Soviet Union (FSU) countries were funded by the TACIS programme before the establishment of IfS. Some of the projects funded by IfS are: bio-safety and bio-security improvement at the Ukrainian anti-plague station (UAPS) in Simferopol, combating illicit trafficking of nuclear and radioactive materials in FSU countries (Russian Federation, Ukraine, Armenia, Moldova, Georgia, Azerbaijan and Belarus) and combating illicit trafficking of nuclear and radioactive materials in selected FSU and Mediterranean Basin countries and preparation of border management activities in the ASEAN region. “Six-monthly Progress Report on the Implementation of the EU Strategy against the Proliferation of Weapons of Mass Destruction (2011/II)”, *Official Journal of the European Union*, C 066 (6 March 2012), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:066:0006:01:EN:HTML> (last visited Nov. 27, 2013).

⁶⁸ European External Action Service, “Instrument for Stability (IfS) – EU in Action,” at http://eeas.europa.eu/ifs/index_en.htm (accessed Dec. 15, 2012).

⁶⁹ “Council Regulation (EURATOM) No 300/2007 of 19 February 2007 Establishing an Instrument for Nuclear Safety Cooperation”, *Official Journal of the European Union*, L 81/1 (22 March 2007), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:081:0001:0010:EN:PDF> (last visited Nov. 27, 2013).

⁷⁰ European External Action Service, “Instrument for Nuclear Safety Co-operation,” available at http://eeas.europa.eu/nuclear_safety/index_en.htm (accessed 12 December 2012).

⁷¹ White, *Understanding European Foreign Policy*, p. 24.

Institutional Overlaps

The competences of several EU institutions overlap in the conduct of the EU's non-proliferation policies in general and its efforts for countering WMD terrorism in particular – as has been the case in EU financing in these realms. The Commission deals with technical areas, such as countering CBRN risks and nuclear safety, but its competence sometimes extends to the political realm as well.⁷²

Before the establishment of the EEAS, Council bodies had been responsible for conducting WMD policy. The competences of the Commission and Council bodies usually overlapped and led to turf battles: “EU arms control policies have long been hampered by competition between the European Commission [...] and the Council of the European Union [...]”⁷³ Zwolski, on the other hand, expects that institutional tensions will decrease after the establishment of the EEAS by the Lisbon Treaty and argues: “The EEAS, under the leading role of the HR of the Union for Foreign Affairs and Security Policy, may potentially help to overcome competition between the Council Secretariat and the Commission.”⁷⁴ However, there is also the risk that the EEAS might also get affected by institutional rivalries and become a part of them.⁷⁵

Differences in the EU Member States' interests and approaches

There are several factors that lead to differences in the EU Member States' approach to non-proliferation, which limits the EU's ability to act in this realm. The major factor is the differences in the interests of the Member States. For example, France's initial position on the NPT was negative before the 1990s, because the country was trying to develop its own nuclear power. When it could finally develop its own nuclear arsenal, only then had it become a party to the NPT in 1992 and started contributing to the EC/EU policy on non-proliferation.

Another factor is that some EU Member States are NATO allies and some are not. This surely affects their view of nuclear weapons and the EU's relationship with NATO and the US. Those EU Member States which are also NATO allies are supposed to support the Alliance's nuclear stance and act according to their defence commitments within this framework. However, non-NATO EU Member States do not have to abide by NATO's nuclear stance and some of them denounce nuclear weapons as a whole.

⁷² For example, in the CBRN Action Plan, the Commission called the European Union to “make a stronger effort to present a coordinated view in such international fora and at meetings of these international organisations.” This is surely a political statement. Commission of the European Communities, “Communication from the Commission to the European Parliament and the Council”.

⁷³ Oliver Meier, “The EU's Non-proliferation Efforts: Limited Success,” *Arms Control Today* (Arms Control Association, 2008), available at http://www.armscontrol.org/act/2008_05/OliverFeature (last visited Nov. 27, 2013).

⁷⁴ Kamil Zwolski, “The External Dimension of the EU's Non-Proliferation Policy: Overcoming Inter-Institutional Competition”, in Paul James Cardwell (ed.), *EU External Relations Law and Policy in the Post-Lisbon Era* (The Hague: T.M.C. Asser Press, 2012), p. 372.

⁷⁵ Some analysts also see it as a possibility that turf battles might occur between the President of the European Council and the HR/VP because both of them have representational competences in the EU in the field of external action. See Kamil, Zwolski, “Unrecognized and Unwelcome? The Role of the EU in Preventing the Proliferation of CBRN Weapons, Materials and Knowledge,” *Perspectives on European Politics and Society* 12(4) (2011), pp. 477-492.

This brings us to the difference between those EU Member States which possess nuclear weapons and those that do not. The nuclear weapon states (NWS) find these weapons necessary to provide national security. They only oppose their possession/acquisition by certain states, such as North Korea and Iran, and non-state actors. Non-nuclear weapon states (NNWS), on the other hand, view the possession of nuclear weapons by any state as a threat to international peace and security. France and the UK are the two NWS in the EU. Ireland and Sweden are the NNWS which support nuclear disarmament and they pursue such a stance, not only within the EU, but also in the international non-proliferation fora.

EU Member States also have diverging energy interests and this also affects their non-proliferation stance. Some Member States prefer the use of nuclear power for peaceful purposes to produce electrical energy. On the other hand, some are against its use as a whole. The bilateral nuclear cooperation agreements that France concluded with Algeria, Libya, and the United Arab Emirates and its preparation for concluding similar agreements with Jordan, Morocco and Qatar during Sarkozy's Presidency, have caused concerns in other Member States.⁷⁶ This is a clear example that reveals the French preference to choose its own national interests over EU interests.

Implementing effective policies in the realm of non-proliferation and countering WMD terrorism require, first and foremost, intelligence and information sharing between international actors. However, this is something on which EU Member States are not keen. These are very sensitive policy areas and providing intelligence and information on such areas as the exports/imports of CBRN materials might infringe national interests.

Furthermore, due to their special ties with certain countries, some Member States do not want the others to interfere with their own areas of influence. France's conclusion of bilateral nuclear cooperation agreements with some countries in North Africa and the Middle East, as well as the EU's decision not to include a WMD clause in the negotiated Free Trade Agreement with India due to some Member States' insistence on preserving their national interests, are two important examples in this regard. Such instances surely erode the EU's credibility in its non-proliferation policy and inevitably have a negative impact on its counter-WMD terrorism efforts.

Another factor which limits EU policy on non-proliferation is the Member States' individual preferences to operate through other frameworks, such as the G-8 and the New Agenda Coalition, rather than through the EU.⁷⁷ Member States might also prefer to pursue their own non-proliferation policies, sometimes through bilateral tracks.⁷⁸ For example, at the 2005 NPT Review Conference, the Netherlands adopted a more independent approach than that of the EU and submitted its own working paper together with "the 'NATO-7' group," comprising of Belgium Italy, Spain, Norway, Lithuania and Romania.⁷⁹ This leads some analysts to contend that the EU can only "provide

⁷⁶ Meier, "The EU's Non-proliferation Efforts: Limited Success."

⁷⁷ Bruno Tertrais, "The European Union and Nuclear Non-Proliferation: Does Soft Power Work?", *The International Spectator* 40(3) (2005), p. 54.

⁷⁸ *Ibid.*, p. 53.

⁷⁹ Harald Müller, "The 2005 NPT Review Conference: Reasons and Consequences of Failure and Options for Repair" (The Weapons of Mass Destruction Commission, 2006), available at <http://www.un.org/disarmament/education/wmdcommission/files/No31.pdf> (last visited Nov. 27, 2013), p. 11.

for middle ground between different ‘camps’ of the NPT-state members.”⁸⁰

Assessing the EU’s performance in Counter-WMD Terrorism activities

Although the EU employs various other mechanisms, its non-proliferation/WMD terrorism policy has mainly been conducted through declarations and adoption of a significant number of action plans, strategies, regular reports, etc. This is mainly because declarations are easier to agree on and do not produce any implementation costs. Even EU Member States themselves criticize this declaratory nature of the policy. Van Ham contends: “[...] some member states also remain sceptical that the EU itself has the wherewithal, cunning and experience to go beyond declaratory policy and make a real impact on matters of importance.”⁸¹

The limited performance of the EU in non-proliferation and counter-WMD terrorism, on the other hand, also affects its relationships with other countries and organizations, such as the US and NATO. It is mainly due to the Member States’ differing interests and sensitivities and consequent incoherent policy of the EU that the EU-US cooperation “remains *ad hoc* and patchy.”⁸² This has a lot to do with their respective security identities. The US does not hesitate to use military force when it deems necessary whereas the EU always sees the use of force as a last resort. Therefore, in their non-proliferation efforts, the US considers pre-emptive measures to be an effective tool whilst the EU prefers political dialogue and financial support mechanisms.⁸³ This difference can even be detected in the EU’s preference for the term ‘CBRN terrorism’ over ‘WMD terrorism’ which has military connotations and is the term preferred by the US.

It should be noted that the support the EU gave to the US in Afghanistan had faded away in the Iraq War, causing a rift not only between the EU and the US but also among EU Member States. With regard to the issue of Iran’s nuclear programme, on the other hand, the EU prefers the use of economic and political sanctions whereas the US does not overlook military intervention as an option. Furthermore, the EU and the US also cannot even agree on the future state of the international non-proliferation treaties and regimes. Ferguson and Van Ham argue: “Despite [...] cooperative EU-US endeavours, the problem remains that whereas the United States is in a revolutionary mood, willing (and even keen) to pull the rug from under existing non-proliferation regimes, the EU may well be too conservative, defending the status quo despite the obvious need for reforms.”⁸⁴ Nevertheless, for an effective approach to WMD terrorism, EU-US cooperation is indispensable.

⁸⁰ Christos Katsioulis and Christian Mölling, “NPT Review 2010 – What Role for the EU?” *International Policy Analysis* (Friedrich Ebert Stiftung, 2010), available at <http://library.fes.de/pdf-files/id/ipa/07109.pdf> (last visited Nov. 27, 2013), p. 11.

⁸¹ Van Ham, “The European Union’s WMD Strategy and the CFSP,” p. 7.

⁸² Peter Van Ham, “WMD Proliferation and Transatlantic Relations: Is a Joint Western Strategy Possible?” (The Clingendael Institute, 2004), available at http://www.clingendael.nl/publications/2004/20040400_cli_ess_vanham.pdf (last visited Nov. 27, 2013), p. 37.

⁸³ See also *ibid.*, pp. 6-7.

⁸⁴ Charles D. Ferguson and Peter Van Ham, “Beyond the NRA Doctrine,” *The National Interest* 87, (Jan./Feb. 2007), p. 57.

The major problem with the EU's approach, on the other hand, is that it attempts to tackle the issue of WMD terrorism through non-proliferation policies only, without designing specific ways to deal with it. This leaves the EU with the only option of supporting international non-proliferation treaties and regimes and providing technical and financial assistance to third countries. Van Ham asks: "How can treaties and regimes that were designed to address state-based threats deal effectively with non-state threats as well?"⁸⁵

This does not surely mean that support for international regimes and treaties on non-proliferation or to third countries is not important in tackling the threat of WMD terrorism. To the contrary, it is crucial but it is not sufficient by itself. The EU also recognizes this and actually has done a great deal to prepare to be able to respond to CBRN attacks (especially civilian response). Nonetheless, this does not suffice as well.

The EU should design effective policies to prevent proliferation to terrorists. It has to cooperate more with its partners and especially be open for information and intelligence sharing. It has to engage its candidate countries more in these processes as well. For example, one of the EU candidate countries, Turkey has a crucial location which constitutes a favourite route for illicit trafficking of CBRN materials.⁸⁶ Asking Turkey to be a part of and support international non-proliferation treaties and regimes is one thing, but engaging it effectively through information and intelligence sharing, as well as technical and financial support for fighting against illicit trafficking of CBRN materials through its soil, is another. The latter would prove more effective and would significantly contribute to prevention.

Maintaining 'a credible deterrent' is also important in dealing with WMD terrorism. "It is often argued that deterrence, in particular nuclear deterrence, has no value when it comes to the terrorists using WMDs. [...] This however is not completely true. These arguments overlook fundamental qualities of a holistic and credible nuclear deterrent."⁸⁷ In this view, such a deterrent is necessary for effectively deterring nuclear state sponsors to help terrorists and also terrorists.⁸⁸ Terrorists can also be deterred by a holistic deterrence approach which involves "a mix of nuclear and conventional forces as well as large capabilities" to respond to terrorist attacks.⁸⁹ This is because WMD attacks would be rather costly and risky for terrorists. Therefore, if terrorists get to know that the impact of their attacks will be lowered by effective response, then they will not prefer to carry out such attacks;⁹⁰ they will be 'deterred.' Roberts gives NATO's CBRN Defence Battalion as the example of a deterrent in this regard. Surely, this article does not suggest that the EU should develop a similar capability. Those EU Member States which denounce the use of nuclear weapons

⁸⁵ Van Ham, "WMD Proliferation and Transatlantic Relations," p. 29. Van Ham calls this the EU's "treaty fetishism." Ibid.

⁸⁶ For more on this, see Sinan Ülgen, "Preventing the Proliferation of Weapons of Mass Destruction: What Role for Turkey?" (EDAM Discussion Paper Series - 2010/2, 2010), available at <http://www.edam.org.tr/eng/document/gmf-ulgen-final.pdf> (last visited Nov. 27, 2013).

⁸⁷ Guy B. Roberts, "Hostis Humani Generis: The Threat of WMD Terrorism and How NATO is Facing the Ultimate Threat," *Defence Against Terrorism Review* 2(1) (2009), p. 11.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Ibid.

would object to a nuclear deterrent. But effective response measures would surely make deterrence work. Howorth contends:

[...] a debate on the adoption by the EU of nuclear deterrence would strain to the utmost the foundation stones of an EU strategic culture. To refuse to adopt a deterrent posture in the absence of missile defences would be to disavow the underlying military rationales of the EU's two most important military powers and to indirectly commit the EU to ever greater *conventional* defence expenditure. But to adopt such a stance would be to fly in the face of the deeply embedded anti-nuclear ethos of a large majority of member states. Nuclear issues, understandably, are the absent guest at the ESDP table.⁹¹

Therefore, rather than the EU's creation of its own nuclear deterrent, a better option would be NATO-EU cooperation in deterrence against WMD terrorism. Nevertheless, this is not easy. Those EU Member States that denounce NATO's nuclear capabilities would object to that. What is more important is that NATO-EU cooperation is at a stalemate right now and nothing (except for Operation Althea which is conducted by the EU through the use of NATO assets and capabilities) can be formally discussed between the two organizations. There are two reasons for this stalemate. One of them is the double vetoes by Turkey and Southern Cyprus and the other one is the French stance against NATO-EU cooperation.⁹²

It should be noted that, in 2003, when NATO was developing its Civil Emergency Planning Action Plan (mainly for response to WMD terrorism), it aimed to work with partners, especially the EU. Nevertheless, due to the objections of France, NATO-EU cooperation could not be achieved in this regard. Monaco states: "Some NATO insiders deplore the lack of co-operation between NATO and the EU in civil emergency planning and noted that EU officials were invited to Romania but did not turn up. France as usual was identified as the main obstacle to increased co-operation between the two institutions in this field [...]"⁹³ Surely, there were other obstacles as well, but this is only one example which shows a well-known French attitude on NATO-EU cooperation and can be varied. This example is especially significant because it is mainly about NATO-EU cooperation in responding to WMD terrorism.

⁹¹ Jolyon Howorth, *Security and Defence Policy of the European Union* (Palgrave MacMillan, 2007), pp. 194-195.

⁹² The problem of double vetoes goes way beyond the scope of this article and thus will not be explained here. Nevertheless, it should be mentioned at this point that Turkey and Southern Cyprus reciprocally veto any security arrangements between Cyprus and NATO, and, Turkey and the EU respectively. An important part of these arrangements are about information-sharing between the affected organizations and the country concerned. This complicates information-sharing not only between the country and the organization, but also between NATO and the EU. Inevitably, such a situation also creates problems with regard to information-sharing on WMD terrorism between the two organizations. The French stance against information-sharing between the EU and NATO should also be noted at this point. For more on the NATO-EU stalemate, see: Münevver Cebeci, "NATO-EU Cooperation and Turkey", *Turkish Policy Quarterly*, 10(3), available at [http://www.turkishpolicy.com/dosyalar/files/Munevver%20Cebeci\(1\).pdf](http://www.turkishpolicy.com/dosyalar/files/Munevver%20Cebeci(1).pdf) (last visited Nov. 27, 2013) pp. 93-103.

⁹³ Annalisa Monaco, "NATO Responds to a 'Dirty Bomb,'" *NATO Notes* 5(7) (2003), available at http://www.esdpm.org/pdf/2008_artrel_134_2003_archives_11_nato_notes_vol_5_no_7.pdf (last visited Nov. 27, 2013), p. 8.

NATO-EU cooperation or EU-US cooperation would only make sense, if all the EU Member States could at least agree on the importance of the WMD terrorism threat. Although the ESS named this threat as the “most frightening scenario,” the steps taken by the EU and its Member States so far do not reflect this concern. There are even some analysts who argue that the ESS “overemphasizes military threats, by exaggerating the importance of both terrorism and WMD specifically, as compared to other threats.”⁹⁴ Biscop claims: “Terrorism and proliferation of WMD certainly are the most important remaining *direct military* threats to the EU, now that large-scale aggression is no longer a probability. That does not mean that these threats are likely to materialize on a significant scale, however.”⁹⁵ Although he agrees that terrorist groups’ acquisition of WMD would increase the threat; in his view, this only “demonstrates the importance of effective non-proliferation, but should not lead to alarmism.”⁹⁶ Under these conditions, it becomes hard to talk about a coherent EU policy in countering WMD terrorism. Ferguson and Van Ham contend: “We certainly do not need new declarations and statements; plenty of good ideas are already expressed in those papers. Leadership and strategic vision, however, are required to set clear priorities in the Western strategic agenda.”⁹⁷

Conclusion

This article has argued that the EU’s stance against WMD terrorism remains rather declaratory and limited. This is because of the EU’s preference to deal with this issue mainly through the broader framework of its non-proliferation policy, which is based on supporting international non-proliferation treaties and regimes. The lack of coherence in the EU’s non-proliferation policy, thus, affects its stance on WMD terrorism as well. This is mainly due to the diverging interests and security cultures of the Member States and inter-institutional rivalry within the EU.

The EU actually has adequate instruments and mechanisms to deal with non-proliferation. It surely does not need any more strategies, declarations, reports and action plans. However, there is need for action: finding reliable ways of sharing information and intelligence with its partners, designing more effective policies for credible deterrence, increasing efforts for post-attack response, etc. All these, however, cannot be done through attempts to achieve the lowest-common denominator among Member States’ preferences. Coherence both at the institutional level and among the policies of Member States is crucial. Institutional challenges might be solved with some structural and administrative efforts. However, the divergences among Member States may not be easily overcome.

⁹⁴ Sven Biscop, *European Security Strategy – A Global Agenda for Positive Power* (Ashgate, Aldershot and Burlington, 2005), p. 19.

⁹⁵ *Ibid.*, p. 20. Emphasis in original.

⁹⁶ *Ibid.*, p. 21.

⁹⁷ Ferguson and Van Ham, “Beyond the NRA Doctrine,” p. 57.

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An Overview of Legal Responses to Terrorism *

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I. INTRODUCTION

“Terror” is a generic term referring to the systematic violent events that disrupt the appropriate functioning of the social and political order, bring loss of life and property in large scale, and cause people to suffer deeply in Turkey, as in many other countries today. The most specific feature about the methods used by terrorists is to try to realize their illegal political or ideological purposes by means of violence, threat and pressure. Terror acts are crimes committed as organized or within the framework of terrorist organizations. Terror and terrorism in a healthy social body resemble a pathological case that needs treatment. Therefore, states facing a terrorist threat make legal reforms in order to punish offenders while protecting the innocent and compensating for losses resulting from terrorist acts to prevent terror and terrorism, taking into consideration the facts relating to each case.

However, terrorist acts cannot usually be restricted within the borders of one single country because of their preparation and implementation; rather, they gain an international nature. Today terror and terrorism, due to not only this aspect but also to their consequences, have become the common problem of humanity. Therefore, the issue has always remained on the agenda of international organizations such as the United Nations, NATO, the European Council and the European Union; various decisions have been taken by those organizations and many international treaties have been signed in order to prevent terrorism by using international cooperation.

Turkey has been deeply suffering from terror and terrorism since the 1980s, although the problem is getting smaller over time. Our country has so far around 5,000 martyrs (combat deaths), lost nearly 40,000 citizens, and incurred huge material losses due to the acts of terrorism. Since the 1990s, Turkey has introduced special laws to prevent terrorism, punish those committing such

* This is a speech that was given at the opening of the “Legal Aspects of Terrorism Course” dated between 06-10 February 2012.

offenses, protect those facing terrorist acts, help sufferers of terrorist acts, compensate for losses arising from terrorist acts and combat terrorism. These new laws should also prevent the commission of crimes specified in subparagraphs (a), (b) and (c) of paragraph 1 under Article 250 of the Criminal Procedure Law, to identify and listen to transmissions conducted via telecommunication means with a judge's permission or written order of competent authorities as specified in the law in cases where obtaining a judge's approval would be late or delay is not tolerable, and to study and record signal data coming from such communications in order to track activities of terrorist organizations in this framework. The idea underlying these laws is to ensure combating terrorism within the legal framework.

It is understood that a new draft of law is underway in order to supplement the legislation in force as far as it is incomplete or inadequate. It is quite natural to update the Law for Combating Terror in the light of practical experience and newly emerging conditions.

Separatist/secessionist terror organizations target the Republic of Turkey. It is the basic duty of all state agencies as well as the common task of all citizens to maintain the indivisible integrity of the Republic of Turkey with its country and nation. However, this fight needs to be maintained in harmony with the basic principles of the Republic of Turkey, as specified in the Constitution, particularly the regards to the principles concerning respect for human rights, democracy, secularism and the rule of law. It is essential to combat terrorism within this framework.

Bearing in mind the purposes mentioned in the Introduction, "terror[ism]" is defined in some of the laws enacted in Turkey and various countries; in some other laws, it is taken as an already known concept, where provisions directly related to terror acts are included, and in some other laws punitive articles are added without using the term "terror[ism]" to deal with typical terrorist acts.

II. THE TERM "TERRORISM" AND SOME CONCEPTUAL ISSUES IN TURKISH LAW

In Article 1 of the Law 3713 for Combating Terror of 12 April 1991, as amended by Law 4928 of 15 July 2003, the term "terror" is described as follows:

Terror refers to all acts meaning offenses committed by person or persons belonging to an organization, using one of the methods of pressure, fear, intimidation, coercion and threat, aiming at replacing features of the Republic specified in the Constitution; destroying the State's internal and external security, public order or overall health, political, legal, social, secular and economic order; distorting indivisible unity of the State with its country and nation, endangering existence of the Turkish State and Republic, debilitating or abolishing or demolishing the State's authority, eradicating basic rights and liberties.

As seen above, the scope of the definition is quite broad. It is a prerequisite for terror acts to "belong to an organization"; thus, individual acts of terrorism without such an organizational connection are left outside the definition. Besides, in the following articles of the Law for Combating Terror, the definition for "terror offender" (Article 2) in the majority of the crimes

mentioned in articles of the Turkish Criminal Law and other laws as listed in provisions concerning “terror crimes” and “crimes committed with the aim of terror” (Articles 3-4), respectively, can be an individual “person” or “anybody” without an organizational connection. On the other hand, it is a considerable shortfall that “Crimes committed with the aim of terror” do not cover article 220 of the Turkish Criminal Law regarding “Setting up organization for committing crime” (comp. art. 4/a).

III. ASSESSMENTS REGARDING TERROR AND TERRORISM IN NATIONAL AND INTERNATIONAL DOCUMENTS

A – General Perspective

In today’s world, the dimensions that terrorism has reached by going beyond borders of individual countries make it a common problem faced by humanity. This also makes it obligatory to have not only national but also international cooperation for preventing terror acts that are characterized as organized crime. That is why, it is sensible to address legal regulations in several countries as well as the decisions and resolutions of international organizations such as the United Nations, NATO, the European Council and the European Union.

At this point, in relation to the assessments regarding terrorism, we will quote some examples from Turkish Law 3713 on the General Motives of the Law for Combating Terror, dated 12 April 1991, one article containing motives of the “Antiterrorism and Effective Death Penalty Act of 1996” in the United States of America, the United Nations General Assembly Declarations on Measures for Eliminating International Terrorism, some parts of NATO’s main decisions on counterterrorism and as well as some parts of the Explanatory Memorandum,” which states the motives of the European Union Council’s Framework Decision for Combating Terrorism.

B - National Documents

Turkish Law; Motives for the Law on Combating Terror

Since the provisions in the Turkish Criminal Law with a general application regarding the prevention of terrorist crimes and the punishment of terrorist offenders in Turkey remain insufficient to this end, Law 3713 for Combating Terror of 12 April 1991 was enacted. Upon official letter of the General Directorate of Laws and Decisions of the Prime Ministry, dated 8 April 1991, signed by Prime Minister Yıldırım Akbulut, the Draft Law for Combating Terror was submitted to the Turkish Grand National Assembly. It had a broad “General Motives” section. Paragraphs at the beginning of the General Motives read as follows:

Terrorism has threatened communities and countries since the old times of history. In our century, terrorism has become more widespread day by day. Terrorism has been successful in some of the small countries that are elected as implementation areas, encouraged some of the implementing countries; in this way, the zone of terror has gradually become wider. After that stage, terrorism has not remained just a threat any longer. It became a great danger in front of us. Support given by some

terrorist states caused terrorism to enlarge its dimensions and made it international.

Terror organisations on a small or large scale with an ideological target usually exist in every country. Terrorism arising due to the activities of such organizations is still a great problem for many countries of the world, and the wounds it makes are getting deeper day by day.

Because of this reason, terrorism is such an issue that it needs to be on the agenda of governments and countries all the time, and it covers measures that need to be taken urgently and in the shortest time possible, because terrorism gains ground by making use of suitable conditions in disregarding time or other borders. This, in turn, makes it obligatory to make available and at hand an effective, rational and determined program and instruments for combating terrorism in every period.

As is well-known, our country is exposed to terrorism because of its geographical location. Therefore, it has been involved in combating terrorism for many years. The Republic of Turkey has reiterated many times its belief that its friends and allies should take a definite stance against ‘terrorism’ in mind and make efforts to bring this issue to the agenda in various international meetings.

Turkey has learned the fact that terror should not be considered to be a response just to certain specific political bodies or a social group within the existing state order with the horrible events it went through before 1980 and other bitter experiences.

On the one hand, we should enact regulations which allow us to combat terrorism that has no respect for basic rights and liberties as vested in the Constitution, and uses violence as an instrument. On the other hand, we should improve provisions that restrict the liberty of expressing ideas which do not use violence for achieving the democratic social order and the liberty of organizing ideas that do not involve violence...

C – International Documents

1. United Nations’ Declarations Regarding International Terrorism

a) General Perspective

Article 1 of the Charter of the United Nations, signed on 26 June 1945 in San Francisco, defines the purposes of the international organization founded with this Charter. The article starts as follows:

“The Purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, ...”

Within this context, the United Nations’ General Assembly has kept the prevention of international terrorism on the agenda of its annual ordinary meetings, particularly since the 1990s, as a threat to international peace and security, and made certain resolutions on this issue. Some parts are quoted

from declarations that were approved with those resolutions and titled overall “Measures to Eliminate International Terrorism,” such as the example below.

b) Declaration 49/60 of 9 December 1994

Some articles of the Declaration of the United Nations’ General Assembly approved with Resolution 49/60 in its meeting of 9 December 1994 are as follows:

“1. The Member States of the United Nations solemnly reaffirm their unequivocal condemnation of all acts, methods and practices of terrorism, as criminal and unjustifiable, wherever and by whomever committed, including those which jeopardize the friendly relations among States and peoples and threaten the territorial integrity and security of States;

2. Acts, methods and practices of terrorism constitute a grave violation of the purposes and principles of the United Nations, which may pose a threat to international peace and security, jeopardize friendly relations among States, hinder international cooperation and aim at the destruction of human rights, fundamental freedoms and the democratic bases of society;

3. Criminal acts intended or calculated to provoke a state of terror in the general public, a group of persons or particular persons for political purposes are in any circumstances unjustifiable, whatever the considerations of a political, philosophical, ideological, racial, ethnic, religious or any other nature that may be invoked to justify them;

4. States, guided by the purposes and principles of the Charter of the United Nations and other relevant rules of international law, must refrain from organizing, instigating, assisting or participating in terrorist acts in territories of other States, or from acquiescing in or encouraging activities within their territories directed towards the commission of such acts;

5. States must also fulfil their obligations under the Charter of the United Nations and other provisions of international law with respect to combating international terrorism and are urged to take effective and resolute measures in accordance with relevant rules of international law and international standards of human rights for the speedy and final elimination of international terrorism, in particular:

a) To refrain from organizing, instigating, facilitating, financing, encouraging or tolerating terrorist activities and to take appropriate practical measures to ensure that their respective territories are not used for terrorist installations and training camps, or for the preparation or organization of terrorist acts intended to be committed against other States or their citizens; ...”

c) Declaration 51/210 of 17 December 1996

The United Nations’ General Assembly approved another declaration with Resolution 52/210 in its meeting of 17 December 1996 with a view to supplement Declaration 49/60 of 9 December 1994. Some articles of the declaration containing new components are as follows:

“2. The States Members of the United Nations reaffirm that acts, methods and practices of terrorism are contrary to the purposes and principles of the United Nations; they declare that knowingly financing, planning and inciting terrorist acts are also contrary to the purposes and principles of the United Nations;”

d) Declaration 52 /165 of 15 December 1997

Some articles of Declaration 52 /165 approved with the Resolution of the United Nations General Assembly of 15 December 1997 by reiterating former declarations as well as containing new provisions or those considered useful to be renewed are as follows:

“The General Assembly,

1. Strongly condemns all acts, methods and practices of terrorism as criminal and unjustifiable, wherever and by whomsoever committed ...

3. Reiterates its call upon all States to adopt further measures in accordance with the relevant provisions of international law, including international standards of human rights, to prevent terrorism and to strengthen international cooperation in combating terrorism ...;”

e) Declaration 53/108 of 8 December 1998

The United Nations’ General Assembly approved another Declaration with Resolution 53/108 in its meeting of 8 December 1998 by reiterating former declarations. Some of its articles are newly introduced or considered useful to be renewed are as follows:

“The General Assembly,

6. Reaffirms that international cooperation as well as actions by States to combat terrorism should be conducted in conformity with the principles of the Charter of the United Nations, international law and relevant international conventions; ...”

2. NATO’s Main Decisions on Counterterrorism

a) General Perspective

The purpose of the North Atlantic Treaty Organization (NATO), which was established by North Atlantic Treaty, signed in Washington D.C. on 4 April 1949 by 12 States and has today 28 Member States, including Turkey and Greece, is described in the preamble of the Treaty as follows:

“The Parties to this Treaty reaffirm their faith in the purpose and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all governments. ... They are resolved to unite their efforts for collective defence and for the preservation of peace and security. ...”

The fight against terrorism is an important issue for NATO. Both the new Strategic Concept and the Lisbon Summit Declaration make clear that terrorism constitutes a real and serious threat to the security of the Alliance and its members.

b) The Alliance's Strategic Concept

According to the Alliance's new Strategic Concept, approved by the Heads of State and Government participating in the meeting of the North Atlantic Council in Washington D.C. on 24 April 1999 "... Alliance security must also take account of the global context. Alliance security interests can be affected by other risks of a wider nature, including acts of terrorism, sabotage and organised crime, and by the disruption of the flow of vital resources. ... Arrangements exist within the Alliance for consultation among the Allies ... and, where appropriate, co-ordination of their efforts including their responses to risks of this kind."

c) Lisbon Summit Declaration

According to Summit Declaration, issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Lisbon on 20 November 2010:

"Instability or conflict beyond NATO borders can directly threaten Alliance security, including by fostering extremism, terrorism, and transnational illegal activities such as trafficking in arms, narcotics and people. Terrorism in particular poses a real and serious threat to the security and safety of the Alliance and its members. All acts of terrorism are criminal and unjustifiable, irrespective of their motivations or manifestations. We will continue to fight this scourge, individually and collectively, in accordance with international law and the principles of the Charter. In accordance with the Strategic Concept, we will continue to enhance both the political and the military aspects of NATO's contribution to deter, defend, disrupt and protect against this threat including through advanced technologies and greater information and intelligence sharing. ..."

3. The European Union Council's Policy for Combating Terrorism

a) The Treaty on European Union

The Treaty on European Union, signed on 7 February 1992 in Maastricht, states the European Union's purpose regarding "Provisions on police and judicial cooperation in criminal matters" in Article 29 under Title VI to be as follows:

"...to provide citizens with a high level of safety within an area of freedom, security and justice by developing common action among Member States in the fields of police and judicial cooperation."

"The objective shall be achieved by preventing and combating crime, organised or otherwise, in particular terrorism, trafficking in persons and offences against children, illicit drug trafficking and illicit arms trafficking, corruption and fraud ..."

b) Framework Decision on Combating Terrorism

Motives of the Decision (Explanatory Memorandum)

The Explanatory Memorandum of 19 September 2001, which constitutes the Motives for the “Council Framework Decision of June 2002 on Combating Terrorism” from the European Union Council, prepared by the European Union Commission, explains the European Union’s attitude concerning terrorism to be as follows:

“Terrorism constitutes one of the most serious threats to democracy, to the free exercise of human rights and to economic and social development. Terrorism can never be justified, whatever the target and the place where the offence is prepared or committed. This has never been clearer than in the terrible aftermath of the unprecedented, tragic and murderous terrorist attacks against the people of the United States of America on 11 September 2001. These cowardly attacks highlight the need for an effective response to terrorism at the level of the European Union.”

IV. INTERNATIONAL TREATIES ON COMBATING TERRORISM

A –General Perspective

As understood from the assessments regarding terror and terrorism in the abovementioned national and international documents, international cooperation is obligatory to effectively fight against this phenomenon of our era. Mostly, the impacts of terrorist acts do not remain restricted to one single country. Rather, they reach an extent which involves many countries at the same time. Therefore, many multilateral international treaties were signed within the framework of international organizations, including the United Nations, European Council and the European Union for the prevention of terrorism in generic or specific effects.

Below is given a summary of a few of the treaties signed, agreed, attended and approved by Turkey, to include main themes only, in chronological order.

B - Main International Treaties on the Prevention of Terrorism

The main international treaties signed and ratified by Turkey can be divided into two groups: those with the European Council and those with the United Nations:

1. European Council Treaties on the Prevention of Terrorism

a) European Convention on the Suppression of Terrorism

The European Convention on the Suppression of Terrorism, signed on 27 January 1977 in Strasbourg, is an international treaty of 16 articles. As stated in its preamble, Member States of the European Council state that “extradition is particularly an effective measure to ensure that the perpetrators of acts of terrorism do not escape prosecution and punishment.”

b) The Protocol Amending the European Convention on the Suppression of Terrorism

The Protocol amending the European Convention on the Suppression of Terrorism, signed on 15 May 2003 in Strasbourg, is an international treaty of 19 articles. As stated in its preamble, the Member States of the European Council,

“Wishing to strengthen the fight against terrorism while respecting human rights ...; Considering for that purpose that it would be appropriate to amend the European Convention on the Suppression of Terrorism ...; ...Considering that it would be appropriate to strengthen the follow-up of the implementation of the Convention; ...

Considering that it would be appropriate to open the Convention to the signature of all interested States, have agreed on this Protocol.”

2. United Nations’ Treaties on Prevention of Terrorism

a) International Convention for the Suppression of Terrorist Bombings

The International Convention for the Suppression of Terrorist Bombings was adopted by the United Nations General Assembly on 15 December 1997 in New York and opened for signature on 12 January 1998 in the United Nations’ Headquarters in New York. The States Parties to the Convention – as stated in its preamble – “having in mind the purposes and principles of the Charter of United Nations concerning the maintenance of international peace and security, the promotion of good-neighborliness and friendly relations and cooperation among States”; “deeply concerned about the worldwide escalation of acts of terrorism in all its forms and manifestations”; recalling the “Declaration on Measures to Eliminate International Terrorism annexed to General Assembly Resolution 49/60 of 9 December 1994”, recalling further General Assembly Resolution 51/210 of 17 December 1996 and the annexed Declaration to Supplement the 1994 Declaration, noting that “terrorist attacks by means of explosives and other lethal devices have become increasingly widespread” and “existing multilateral legal provisions do not adequately address these attacks”; “being convinced of the urgent need to enhance international cooperation between States in devising and adopting effective and practical measures for prevention of such acts of terrorism and for the prosecution and punishment of their perpetrators”; noting “that activities of military forces of States are governed by rules of international law outside the framework of this Convention and that the exclusion of certain actions from the coverage of this Convention does not condone or make lawful otherwise unlawful acts, or preclude prosecution under other laws,” have agreed on this Convention.

b) International Convention for the Suppression of the Financing of Terrorism

The International Convention for the Suppression of the Financing of Terrorism was adopted by the United Nations General Assembly on 9 December 1999 in New York and opened for signature on 10 January 2000 in the same place. The States Parties to the Convention – as stated in

its preamble – “bearing in mind the purposes and principles of the Charter of the United Nations concerning the maintenance of international peace and security, the promotion of good-neighborliness and friendly relations among States”; “deeply concerned about the worldwide escalation of acts of terrorism in all its forms and manifestations”; recalling the “Declaration on Measures to Eliminate International Terrorism” annexed to the General Assembly Resolution 49/60 of 9 December 1994, in which “the Member States of the United Nations solemnly reaffirmed their unequivocal condemnation of all acts, methods and practices of terrorism, as criminal and unjustifiable, wherever and by whomever committed, including those which jeopardize the friendly relations among States and peoples and threaten the territorial integrity and security of States”; noting that the same Declaration “encouraged the States to review urgently the scope of existing international legal provisions on the prevention, repression and elimination of terrorism in all its forms and manifestations, with the aim of ensuring that there is a comprehensive legal framework covering all aspects of the matter”; recalling the General Assembly Resolution 51/210 of 17 December 1996, in which “the Assembly called upon all States to take steps to prevent and counteract, through appropriate domestic measures, the financing of terrorists and terrorist organizations, whether such financing is direct or indirect through organizations which also have or claim to have charitable, social or cultural goals or which are also engaged in unlawful activities such as illicit arm trafficking, drug dealing and racketeering, including the exploitation of persons for the purposes of funding terrorist activities”, “in particular to consider where appropriate, adopting regulatory measures to prevent and counteract movements of funds suspected to be intended for terrorist purposes without impeding in any way the freedom of legitimate capital movements and to intensify the exchange of information concerning international movements of such funds”; and “considering that financing of terrorism is a matter of grave concern to the international community as a whole,” have agreed on this Convention.

V. LEGAL REGULATIONS CONCERNING TERROR AND COMBATING TERRORISM

A – General Perspective

Combating terror and terrorism, including the suppression of terror and terrorism, has not only been a subject matter in decisions and resolutions of international organizations such as the United Nations General Assembly, the European Council, the European Union and NATO, and international treaties, but also and initially addressed in the internal law of the Member States of such organizations. Actually, combating terror and terrorism, the protection of society from terror and terrorism, the punishment of terrorists, and compensation for losses of terror sufferers have been addressed by means of laws in various countries; organizations in charge of carrying out such tasks have been established or existing ones have been assigned with the task of combating terror and terrorism. Legal regulations in this area in Turkey, various European countries and the United States of America will be summarized with their main provisions.

B – Legal Regulations in Turkey

In parallel with separatist and secessionist terror acts which have emerged in the southeast of Turkey since the 1980s – even though they stopped or slowed down from time to time – and become so widespread as to affect other regions of the country in the course of time, as well as radical terror activities aimed at destroying the constitutional order with different ideologies, certain laws have been enacted since the 1990s. These laws are for combating terror, monitoring terrorist activities, compensating victims for losses due to terrorist acts, providing instruction and employment opportunities, and protecting all officials who were engaged in combating terrorism. These laws, along with the main provisions of legal regulations they introduced, can be summarized as follows, in chronological order:

1. The Law for Combating Terror (Basic Provisions)

Law 3713 for Combating Terror of 12 April 1991 was the first law enacted to this end in Turkey. According to the effective provisions of the Law for Combating Terrorism, which has been amended as required from time to time, and updated with references made to the criminal legislation in force at the enactment date of the law in relation with terrorist crimes and other crimes committed with terrorist aims. There are references made to the articles of the new Turkish Criminal Code enacted through Law No. 5237 of 26 September 2004, such as those that are members of the terrorist organizations trying to attain purposes mentioned in Article 1 of the law [for Combating Terror] and commit crimes in collaboration with others or individually to this end, and even those who just belong to a terrorist organization and those who commit crimes on behalf of a terrorist organization without being a member of the organization shall be considered to be a terror offender (Art. 2, 3-4).

- Imprisonment or judicial fines to be determined for those committing such crimes in accordance with applicable laws shall be executed by increasing by half; life imprisonment shall be replaced with aggravated life imprisonment (Art. 5/I).
- Those who set up, manage a terror organization or is a member of this organization shall be punished in accordance with Article 314 of the Turkish Criminal Law, which prescribes imprisonment of those who set up or manage an armed terror organization from ten to fifteen years, and from five to ten years for those that are members of such an organization.
- Those that arrange activities of the terrorist organization shall be punished as a manager of the organization. The person who makes propaganda for the terror organization shall be sentenced to imprisonment from one to five years; and if the crime is committed by means of press and publication, the punishment to be served shall be increased by half (Art.7/I-II).
- Any person who delivers or collects funds, knowing that it will be used in financing of terror crimes shall be punished as a member of the terror organization. The same punishment shall apply even if the funds are not spent (Art. 8)

2. The Law on Compensation of Losses Arising from Terror and Combating Terrorism (Aim and Scope)

The aim of the Law 5233 on Compensation of Losses Arising from Terror and Combating Terrorism of 17 July 2004 is – as the title explicitly says itself – to set up the rules and principles regarding compensation for material losses for those incurring such losses due to the terror acts or activities carried out for combating terrorism (Art. 1). The law covers amicable compensation for material losses of natural persons as well as private legal entities due to acts in violation of Articles 1, 2 and 3 of the Law for Combating Terrorism or activities carried out within the framework of combating terror (Art. 2/I).

3. The Law on Amendment of Some Laws

a) General Perspective

Law 5397 on Amendment of Some Laws of 3 July 2005 amended three laws in parallel with Article 135 of the Law 5271 on Criminal Procedure of 4 December 2004 under the title “Identification, listening to and recording the communications.” The amendments that contain common provisions within the same system, still differ in competent authorities in cases where “delay is disadvantageous” can be summarized as follows:

b) The Law on Police Duties and Powers

In accordance with the paragraphs added to Article 7 of the Law on Police Duties and Powers by Article 1 of Law 5397, in order to prevent the commitment of crimes mentioned in subparagraphs (a), (b) and (c) under paragraph 1 of Article 250 of the Criminal Procedures Law, with a judge’s decision or in cases where obtaining judge’s decision would be late or delay is disadvantageous, transmissions made via communication can be identified, listened to, signal data thereof can be processed or recorded upon written command of the General Director of Security or Head of the Intelligence Department. The written command to be issued in cases where delay is disadvantageous shall be submitted to a judge for approval within twenty-four hours. The judge shall make a decision within twenty-four hours at latest. In the event of the expiration of the time or a negative decision of the judge, the measure shall be immediately lifted; records regarding content of the listening shall be destroyed within ten days and the case shall be taken under record via minutes (para. I).

Approval for communications monitoring can be made for three months at most; this period can be extended for another three months at most. However “when it is considered necessary against the continuing dangers within the activities of terror organization” the judge can extend the period several times for three months at a time (para. III).

c) The Law on the Organization, Duties and Powers of the Gendarmerie

According to Supplementary Article 5 added to the Law on the Organization, Duties and Powers of the Gendarmerie by Article 2 of the Law No. 5397, in order to prevent the commitment of crimes mentioned in subparagraphs (a), (b) and (c) under paragraph 1 of Article 250 of the Criminal Procedures Law, with a judge's approval or in cases where obtaining judge's approval would be late or delay is disadvantageous, transmissions made via communication can be identified, listened to, signal data thereof can be processed or recorded upon written command of the General Commander of the Gendarmerie or Head of the Intelligence Department. The written command to be issued in cases where delay is disadvantageous shall be submitted for a judge's approval within twenty-four hours. The judge shall make a decision within twenty-four hours at the latest. In the event of the expiration of the time or a contrary decision of the judge, the measure shall be immediately lifted; records regarding content of the listening shall be destroyed within ten days; the case shall be taken under record via minutes (para. I).

Communications intercept approval can be made for three months at most; this period can normally be extended for only another three months. However "when it is considered necessary against the continuing dangers within the activities of terror organization" the judge can extend the period several times for three months at most each time (para. III).

d) The Law on State Intelligence Services and National Intelligence Service

The first paragraph of Article 6 of the Law on State Intelligence Services and National Intelligence Service was amended by Article 3 of Law No. 5397 and some paragraphs were added to follow that paragraph of the same article. According to the amendment made and new paragraphs added, the National Intelligence Service (MİT) can directly contact ministries and other public institutions and organizations on issues of intelligence; they may also submit written demands with motives to ministries and other public institutions and organizations in order to apply to their archives, electronic information processing centers and communication infrastructure within the scope of its duties, and to obtain information or documents from them (para. I).

In the event of a serious threat against the basic characteristic of the Republic as stated in Article 2 of the Constitution, [as well as] threats against the existence of the democratic state and rule of law, with respect to ensuring the security of the state, discovering espionage activities and identification of disclosure of state secrets, with a judge's approval or in cases where obtaining a judge's approval would be late or delay is disadvantageous, transmissions made by communication means can be identified, listened to, signal data thereof can be processed or recorded upon written command of Undersecretary or Vice Undersecretary of MİT with a view to preventing terrorist activities. In cases where delay is disadvantageous, the written command issued shall be submitted for a judge's approval within twenty-four hours. The judge shall decide within twenty-four hours at latest. In the event of the expiration of the time or a negative decision of the judge, the measure shall be immediately lifted; records regarding content of the listening shall be destroyed within ten days and the case shall be taken under record via minutes (para. II).

The decisions can be made for three months at most; this period can normally be extended once for another three months. However “when it is considered necessary against the continuing dangers within the activities of terror organization” the judge can extend the period several times for three months at a time (para. III).

C – Legal Regulations in Other European Countries

a) Italy

According to Art. 270-bis of the Italian Penal Code (*Codice penale*) under the title “*Associazioni con finalità di terrorismo e di eversione dell’ordine democratico*” (Associations with the aim of terrorism and subversion of democratic order), anybody who constitutes, organizes or directs associations with the purpose of overthrowing the democratic order with acts of violence will be punished with imprisonment from seven to fifteen years.

b) Germany

According to § 129a of the German Penal Code (*Strafgesetzbuch*) under the title “*Bildung terroristischer Vereinigungen*” (Constitution of terrorist associations), anybody who constitutes or become a member of an association with the aim of committing certain crimes mentioned in the Code will be punished with imprisonment from one to ten years.

c) France

According to Articles 421-1, 421-2, 421-2-1 of the new French Penal Code (*Code pénal*) under the title “*Des actes de terrorisme*” (Acts of terrorism), certain crimes mentioned in the Code will be punished with an aggravated imprisonment or imprisonment of years at the highest level. In addition, measures of security are to be applied in certain cases (Art. 421-3).

d) United Kingdom

United Kingdom has a new special law concerning terrorism: “Terrorism Act 2000”. It consists of 131 sections in eight parts under the titles “Introductory,” “Proscribed Organizations,” “Terrorist Property,” “Terrorist Investigations,” “Counter-Terrorist Powers,” “Miscellaneous,” “Northern Ireland” and “General.” The Terrorism Act 2000 is one of the most detailed laws on this subject.

D – Legal Regulations in United States of America

The United States of America has been a target of terrorism in recent years so it has also detailed laws on this subject: “An Act to deter terrorism, provide justice for victims, provide for an effective death penalty, and for other purposes” which was enacted on 3 January of 1996. Short title of this Act is “Antiterrorism and Effective Death Penalty Act of 1996”.

The “USA PATRIOT Act of 2001” has also an important place among the antiterrorism legislation of the US. Among other provisions, it deals with the “acts of terrorism transcending national boundaries (§ 2332b).

VI. ASSESSMENT AND CONCLUSION

1. Terror and terrorism is a fact which causes in our era hundreds, thousands, even tens of thousands of people to lose their lives in many countries across the world, results in both material and moral losses to a great extent, and negatively affects the social, economic and political order. In many countries, it is a method particularly used by separatist movements. In every case, this fact is that terrorism extends internationally as it involves more than one single country at a time due to the planning, preparing and executing terror acts. With such aspects, terror and terrorism has remained a crucial problem to be solved on the agenda of many countries and the international community. Today terror and terrorism have become humanity’s common problem.

Therefore, next to the laws for combating terrorism in many countries, international organizations such as the United Nations, NATO, the European Council and the European Union have made various decisions in order to suppress terrorism and to prevent international terrorism by means of international cooperation, and to carry on the combat within international cooperation; also many international treaties have been signed within or among those organizations so far. One of the common points of these treaties is that the principle of “extradite or prosecute” should be applied in the process of judicial assistance regarding punishment of terrorists after committing crime in a country seek asylum in another; another common point is that terrorist crimes are not considered to be political crimes.

However, in practice, it has been observed that the the decisions of abovementioned international organizations and signed international conventions are not completely abided by. If all states would completely implement the treaties signed for the prevention and combating of international terrorism, as well as fulfill their responsibilities arising from them, the problem could be eliminated to a considerable extent. International terrorism can be prevented by means of international cooperation only. International terrorism, which particularly targets certain countries today, might threaten other countries as well in the future.

2. Turkey has been experiencing the most remorseless terror and terrorist acts in all aspects since the 1980s, while having around 5,000 martyrs (police, jandarma and soldiers killed) in combating terrorism, losing nearly 40,000 citizens due to the terror acts, bearing material losses of a trillion Turkish lira (a billion US dollars) as a result of terrorist acts. Moral losses and moral suffering experienced cannot be accurately measured. Separatist/secessionist terror organizations, which recently inaugurated some steps towards creating autonomous zones in administrative and judicial terms by means of getting organized in urban areas and gradually establishing an independent state, added to the terrorist activities they have committed in rural areas so far in order to distort the national integrity, have the main responsibility for all these losses and suffering.

Although on a smaller scale, some organizations that are against the constitutional order in ideological terms, particularly aiming at replacing the current constitutional regime with a Marxist-Leninist political regime, and fundamentalist organizations which aim at establishing a state founded on religious basis, share the second and third place on the list.

3. All of these organizations, with separatist terror organizations in first place, supply their militants with the financing and arms they need from various activities by using both national and international legal opportunities and loopholes or directly by illicit methods.

For example, drug trafficking has an important role as an illicit means of income for the separatist/secessionist terror organizations. On the other hand, it is known that such illicit organizations get external support in various ways at various stages from getting organized to the activities they commit. Among those providing external support are not only foreign natural persons and legal entities but also foreign states, even some states in the same defense alliance as Turkey. Such support ranges from safeguarding terrorists in their land after committing terrorist acts in Turkey; to providing them with workspace, camping places and military bases for those that are going to commit terrorist acts in Turkey, as well as providing with them training facilities and allowing them to return to their military bases after committing terrorist acts in Turkey, or at least showing tolerance to such movements; and to finding financial resources for terrorist organizations as well as their activities.

Meanwhile, similar to the situation as when Iraq invaded Kuwait in August 1990, in April 1991, after the 1st Gulf War was waged in 1991, led by the US, the United Kingdom and France but also involving the coalition powers against Iraq, they imposed first south of the 32nd latitude, then later south of the 33rd latitude, a “no-fly-zone” to provide protection to Shiites, Turkey had the opportunity to keep an area under control with cross-border military operations conducted under different names by means of exercising its right to hot pursuit of terrorists across the “no-fly-zone” in the north of the 36th latitude which had been proclaimed for the protection of Iraqi Kurds.

Cross-border military operations continued due to the treacherous attacks committed by the terror organization against Turkey even after the US-led invasion of Iraq on 20 March 2003. Among others, the cross-border land operation conducted under the title “Sun Operation,” with the aerial support of the Turkish Air Forces, between 21 and 29 February 2008 is the most important one. However, because American military forces in Iraq did not constitute an obstacle for the separatist terror organization, the terror organization continued to use Northern Iraq as a military basis against Turkey after the American-led invasion, too. It would be too optimistic to expect that the new Iraqi government formed after the withdrawal of the US from Iraq on 15 December 2011 will be willing or effective in prohibiting or preventing activities of the separatist terror organization. The same can be said for the Autonomous Kurdish Government in Northern Iraq, too. Thus, as in the past, today also it is of the utmost importance to effectively exert the power to run cross-border military operations vested by the TGNA in the Turkish government for one year as from 7 October 2011.

4. In order to fight international terrorism, Turkey has either signed all international treaties with the United Nations and the European Council or led, by the same institutions, cooperated with other member states. Turkey also has enacted special laws since the 1990s to prevent terror acts taking place in Turkey since the 1980s and to combat terror and terrorism, due to the inadequacy of general provisions of the Turkish Criminal Law. In addition, a specific law was enacted in order to compensate for material losses incurred due to terror and combating terrorism. With the aim of protecting citizens from terror acts, reforms were imposed enabling the evacuation of some of the far villages and arable fields that could not be secured appropriately due to their fragile position in southeastern Anatolia, where such acts were heavily committed.

5. It has been reported in the press that a new draft law is now being studied in order to complete and improve the parts of the Law for Combating Terror which are considered incomplete and inadequate in practice. As a country which has suffered particularly from separatist/secessionist terrorism in all its aspects since the 1980s, Turkey has great experience in combating terror and terrorism, although there has been no definite end to terrorist activities. Therefore, it is natural to benefit from the experience in the study to be carried out. Moreover, it is a prerequisite of international common sense to benefit from other countries' experience as well.

Turkey is a democratic and secular state where there is rule of law and respect for human rights. The fight against terror and terrorism will be carried out within the legal rules of the democratic regime. We have to suppress terror without making state terror. Combating terror should not be a justification for restricting the freedom of thought and expression. In general terms, every opinion that does not suggest violence or advocate for violence as a method for exercising basic rights and liberties, particularly democratic political rights and liberties, should be defensible.

Increasing awareness of people about combating terror and terrorism will provide sound support for the success of the combat. It will be suitable that our security forces, all our judges and public prosecutors are overall informed about combating terror and terrorism. It would be also suitable if the new law to be enacted regarding terror acts and combating terrorism offers specialization for the security forces and judiciary for success in this matter. Apart from legal provisions to be introduced for an effective fight against terror and terrorism, - in parallel with them - it is necessary to sustain economic, social and cultural development without any discrimination by integrating all regions of Turkey, including east and west, north and south, women and men, young and old, rural and urban, farmers and workers, civil servants and the self-employed, tradesmen and craftsmen. In short, all sections of the society and the Turkish nation, regardless ethnic origin – such as Turks in ethnic sense, Kurds, Arabs, Laz, Georgian, Circassian, Greek, Armenians and Jews must be included and formal education for our children and juveniles, adult education, labor and working opportunities – firstly for young people – for all of our people must be provided. In other words, it is necessary to broaden employment opportunities for all. Taking and implementing all these measures is of great importance to avoid a social environment encouraging terror and terrorism.

With this understanding, it is the most important responsibility of a state of the rule of law that has respect for human rights to achieve a social order where all citizens can live free from the fear of terror in any way and can look to the future with confidence.