Africa’s WMD Proliferation Threat: Intersection of Availability, Opportunity and Desire

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In the realm of WMD-related capability proliferation, the intersection of availability, opportunity and desire has the potential to be the United States' and our international partner's most significant nonproliferation challenge for the 21st century. Africa is a continent where availability, opportunity and desire intersect creating a high risk of actors of concern acquiring capabilities to develop, proliferate and eventually employ WMD. To ensure the U.S. achieves the DOD end state of “no new WMD possession,” the U.S. must implement a “whole of government” approach to address the WMD-related capabilities proliferation threat presented within Africa. This approach can begin with an already established National Security Policy and Interagency system that informs diplomacy, development, and defense planning at the regional and country levels.
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Abstract

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In the realm of WMD-related capability proliferation, the intersection of availability, opportunity and desire has the potential to be the United States’ and our international partner’s most significant nonproliferation challenge for the 21st century. Africa is a continent where availability, opportunity and desire intersect creating a high risk of actors of concern acquiring capabilities to develop, proliferate and eventually employ WMD. To ensure the U.S. achieves the DOD end state of “no new WMD possession,” the U.S. must implement a “whole of government” approach to address the WMD-related capabilities proliferation threat presented within Africa. This approach can begin with an already established National Security Policy and Interagency system that informs diplomacy, development, and defense planning at the regional and country levels.
Africa’s WMD Proliferation Threat: Intersection of Availability, Opportunity and Desire

Increased access to expertise, materials, and technologies heightens the risk that adversaries will seek, acquire, proliferate, and employ Weapons of Mass Destruction.

Chuck Hagel
United States Secretary of Defense

Since implementation of the Nuclear Non-Proliferation Treaty (NPT), predominant international efforts established to address Weapons of Mass Destruction (WMD) proliferation threats are the Biological and Toxin Weapons Convention (BTWC), and the Chemical Weapons Convention (CWC). These international agreements coupled with diplomacy have helped to deter many nation-states from acquiring or maintaining biological, chemical, or nuclear weapons programs. Although there is a possibility for the presence of residual WMD-related capabilities within these countries, Libya, South Africa and Syria are arguable examples of the effectiveness of this nonproliferation regime. Until the 2004 implementation of United Nations Security Council Resolution (UNSCR) 1540, nonproliferation agreements have not adequately addressed the threat we face today of non-state actors acquiring, developing, proliferating or using WMD or WMD-related capabilities.

The availability of WMD-related capabilities around the globe, and opportunities presented to those that desire to acquire and use WMD for terrorism is reason for United States and international concern. In the realm of WMD-related capability proliferation, the intersection of availability, opportunity and desire has the potential to be the U.S. and our international partner’s most significant nonproliferation challenge for the 21st century. To protect U.S. National Security Interests and achieve the Department of Defense’ (DOD) end state of “no new WMD possession,” the U.S. must
implement a “whole of government” approach to address this challenge. Due to the breadth of this problem the U.S. must clearly identify and prioritize regional WMD-related capability proliferation threats. Once the U.S. identifies and prioritizes regional threats, they can use all elements of national power, collaborated with regional and international partnerships, to align ways and means and achieve the DOD end state. Most importantly, as depicted in the 2015 National Security Strategy (NSS), “vigilance is required to stop…non-state actors from developing or acquiring nuclear, chemical, or biological weapons, or the materials to build them.”

This paper will use Africa as a case study to examine the threat of WMD-related capability proliferation within and from the continent, where availability, opportunity and desire intersect. This intersection creates a risk of actors of concern acquiring capabilities to proliferate, develop, and eventually employ WMD. This paper will also provide a recommendation that will assist the U.S. in leading an effort to “shrink space” for WMD-related capability proliferation within Africa, preventing this capability from getting into the hands of terrorists.

The Naval Postgraduate School conducted a similar study for the Defense Threat Reduction Agency (DTRA) in 2004. The study focused on the potential for WMD proliferation within ungoverned spaces of Africa. Although a large portion of the study coincides with this author’s assessments, the overall conclusion of the study attests that the threat of WMD proliferation in Africa is not significant. The study instead found that the most significant threat within Africa is the proliferation of small arms.

This author proposes that a WMD in the hands of terrorists is a threat that the U.S. cannot ignore. The potential for proliferation of WMD capabilities within or from
Africa may be low, but the potential repercussions from such acquisition, if left unchecked, could be catastrophic. The continent of Africa is a WMD-related capability proliferation threat the U.S. and the international community need to address. This author does not argue that the trafficking of small arms in Africa is the more immediate concern for African state governments. However, this does not mean those with a desire to use WMD will not take advantage of the same pathways used for small arms trafficking to traffic WMD-related capabilities. This becomes even a greater risk, if these capabilities are available and the opportunity presents itself.

There are countries within Africa with known and suspected stockpiles of chemical agents. Several African countries are seeking out nuclear energy technology and conducting life science research. The continent operates industrial chemical programs and has dual use facilities, materials and knowledge. Regional and international companies are conducting uranium mining in large portions of Africa. Africa consists of countries with a history of questionable WMD and WMD-related capability proliferation activities. Combined, this makes for the availability of WMD material, technology and knowledge a possibility. Africa’s abundance of fragile states, large swaths of ungoverned territories, and well established illegal trafficking networks presents an opportunity for those who have a desire, to acquire these capabilities. The potential intersection of availability, desire and opportunity presents a global threat. To examine this threat it is important to define some key terms used throughout this paper.

Definitions and Terminology

An agreed upon definition for the terms WMD, WMD-related capabilities, WMD pathways, and actors of concern has proven too elusive in many scientific, military, policy, and academic communities. Using the controversial definition of WMD as an
example, the argument over an appropriate definition between government and civilian WMD professionals has been ongoing for years. Some professionals argue that the term WMD is misleading. These critics believe that chemical, biological, radiological, and nuclear (CBRN) weapons are not all necessarily “massively destructive.” Critics also argue that the word “destruction” is too narrow to capture the range of impacts on society generated from such weapons.

This argument is so relevant, the National Defense University’s (NDU) Center for the Study of Weapons of Mass Destruction published an occasional paper to address this issue. NDU’s paper looks back as far as 1948 when the United Nations (UN) adopted a standard definition of WMD.

[WMD are] …atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above.

NDU’s paper goes on to examine a myriad of different definitions used throughout military, interagency, academic, and international communities for not only WMD but also other WMD-related terms. This paper will not attempt to qualify or redefine any of the currently published definitions, but will use the definitions provided in the 2013 Department of Defense Strategy for Countering Weapons of Mass Destruction (DOD CWMD). The DOD CWMD defines WMD as,

Chemical, biological, radiological, or nuclear weapons capable of a high order of destruction or causing mass casualties, excluding the means of transporting or propelling the weapon where such means is a separable and divisible part from the weapon.

DOD defines WMD-related capabilities as “knowledge, materials, and technologies, related to the acquisition and/or making of a WMD.” The strategy defines WMD pathways as
…networks (links among individuals, groups, organizations, governmental entities, etc.) that enable actors of concern to conceptualize, develop, possess, and proliferate WMD and WMD-related capabilities. These networks encompass ideas, materials, technologies, facilities, processes, products, and events.21

Lastly, the DOD CWMD Strategy defines actors of concern as

State or non-state actors that, left unaddressed, pose a clear potential threat to the strategic objectives of the U.S. Government. [In the WMD context]…poses a threat of developing, acquiring, proliferating, or employing WMD, related expertise, materials, technologies, and means of delivery.22

DOD synthesized definitions from previous and current national and international documents. The intent of this synthesis is to provide the best possible terms to describe the WMD and WMD-related capabilities threat and the strategy to reduce the threat.23

DOD Strategy for Countering Weapons of Mass Destruction

The 2015 National Security Strategy (NSS) states that one of the greatest risks to U.S. enduring national interests is the “proliferation and/or use of weapons of mass destruction.”24 DOD continues to focus on and prioritize efforts to Counter Weapons of Mass Destruction (CWMD) to address this risk. One area of focus for the U.S. is to deny terrorists WMD.25 One DOD CWMD objective is to increase barriers to WMD acquisition, proliferation, and use to achieve the end state of no new WMD possession.26

Actors of concern attempting to acquire and potentially use WMD is a significant threat to not only the U.S. but to global security, peace, and stability.27 The Office of the Secretary of Defense (OSD) drafted the 2013 strategy with a focus on the threat the U.S. faces from not just state actors but non-state actors that seek to proliferate, acquire, or use WMD and WMD-related capabilities against the U.S., our interests and partners.28 A key point emphasized in the strategy and used by the author to shape this paper is,
Proliferation risks arise from the potential convergence of violent extremism, political instability, and inadequate WMD security. Violent extremists are also expanding their geographic reach into ungoverned spaces often used to support illicit activities, including development and proliferation of WMD-related capabilities.29

Realizing the potential threat of WMD or WMD-related capability acquisition by actors of concern followed by the development of a defense strategy to address this threat is a step in the right direction. However, the need to identify potential threat regions is the next step that the U.S. must take in addressing this risk. Africa presents itself as a potential WMD pathway. Actors of concern identifying and capitalizing on this pathway pose a significant security threat to the U.S., its interests, allies and partners.

Actors of Concern (Desire)

WMD-related capabilities in the hands of actors of concern presents a threat to U.S. national security, our interest, partners and allies. Assessments show that acquiring such capabilities increases the potential for the development of a WMD and increases the difficulty in deterring its use.30 Many terrorism experts suggest that “…WMD will not be the first choice of, nor is it within the capabilities of most.”31 Although historically WMD use by terrorists has been minimal, this author proposes that in the complex and uncertain security environment of the 21st century, there are actors of concern with a desire to employ WMD as an instrument of terrorism.32 This proposition is supported by the fact that both religious and ethnic motivated terrorist groups have voiced their willingness to engage in activities that would result in mass casualties and expansive destruction of infrastructure.33 These type of motivations drive actors of concern to seek out available WMD-related capabilities and if the opportunity arises, acquire, construct and employ WMD.34
If terrorists have voiced the desire to use WMD, what has prevented them from doing so on a grand scale? An actor of concern’s desire and willingness to use a WMD are not enough. They also need the appropriate technology, material and knowledge to carry out such an attack. An actor of concern needs two things for the employment of WMD; WMD-related capabilities and available targets. Supposing the availability of targets is not the precondition preventing actors of concern from employing a WMD, we can deduce that the absence of capability is. If this is the case, then it is critical that the U.S. and international partners collaborate on ways to reduce availability and opportunity to keep these capabilities out of the hands of those who desire to use them.

Availability in Africa

The U.S. needs to be concerned about the potential availability of WMD-related capabilities in Africa due to several reasons. This paper will suggest three. First of the concerns surround some African state’s WMD programs and WMD related proliferation history. Second, like most nations, a large portion of African countries have an industrial base that consists of potential WMD-related dual-use facilities, knowledge and materials. This industrial base includes an abundance of uranium deposits and subsequent mining operations. Finally, the concern over failing or failed African states, which this author will discuss later in the paper, which lack governmental oversight and security of these WMD-related capabilities. To identify the potential for the availability of these capabilities within portions of Africa, it is important to review these three primary areas of concern more thoroughly.

Program History

The Federation of American Scientists (FAS) Intelligence Resource Program and the Center for Nonproliferation Studies (CNS), list six African states as either known,
probable or possible WMD states. These states have either had a WMD program, have demonstrated a strong desire to form a WMD program, or WMD and regional experts suspect them of being involved in WMD or WMD-related capability trafficking and storage.\(^3\) These states are Algeria, Egypt, Sudan, Libya, Ethiopia, and South Africa.\(^9\) Of these six, all but Egypt have signed and ratified the CWC.\(^4\) All six listed countries have signed the BWC, but Egypt has not ratified.\(^5\) All six are NPT Non-Nuclear Weapons States (NNWS) members.\(^6\) All but Egypt and Sudan have acceded to the African Nuclear Weapon Free Zone (ANWFZ) Treaty, referred to as the Pelindaba Treaty.\(^7\) Being a signatory or acceding to these treaties does not change the state’s historical and questionable program or proliferation activities nor should it reduce U.S. concerns for the availability of WMD-related capabilities within or around these countries.

Algeria has a history of nuclear program activities that have been of concern to the U.S. since the 1980s.\(^8\) Algeria’s nuclear program activities have included everything from acquisition of a nuclear reactor from China in 1983 to reports of purchasing nuclear program related capabilities from both Niger and Iraq.\(^9\) Algeria succumbed to U.S. pressure, accepting International Atomic Energy Agency (IAEA) safeguards in 1992 and becoming a member of the NPT in 1995. However, IAEA’s subsequent findings of undeclared uranium continue to raise U.S. and international suspicions of Algeria’s full disclosure of their program two decades later.\(^10\) Algeria’s questionable WMD program and proliferation history along with U.S. uncertainty of the size and quantity of Algeria’s potential WMD programs make them a high risk for the availability of WMD-related capabilities.
Although Egypt has historically focused on development of their chemical and biological weapon programs, they have shown interest in the development of a nuclear program in the past.⁴⁷ Egypt acquired a nuclear reactor from the Soviet Union in 1961, but due to the war with Israel, abandoned the program in 1967 and signed the NPT in 1968.⁴⁸ In 2004, the IAEA investigated them for suspicion of conducting undisclosed uranium metal experiments.⁴⁹ Some nuclear proliferation experts fear, without substantive proof, that Egypt is seeking joint nuclear weapons research in concert with Syria and Saudi Arabia.⁵⁰

United States’ unclassified intelligence reports show that Egypt’s biological warfare research and development efforts may include biological agents such as plague, botulism toxin, encephalitis virus, anthrax, and Rift Valley fever.⁵¹ The London Times has reported that India provided Egypt with chemical weapons precursors and an unclassified Defense Intelligence Agency study concluded that Egypt is continuing to conduct research related to chemical agents.⁵² Although intelligence reports have not confirmed, the U.S. suspects that the Egyptian chemical weapons stockpile includes mustard gas, phosgene and potentially nerve gas.⁵³ Egypt and North Korea stand together on refusing to sign the CWC, which bans the acquisition, development, stockpiling, transfer and use of chemical weapons.⁵⁴ Egypt’s history of questionable WMD program and proliferation activities and the uncertainty surrounding the size and quantity of Algeria’s WMD programs make them a high risk for the availability of both WMD and WMD-related capabilities.

Although Sudan does not possess a nuclear weapons program, there are unclassified reports that indicate the country has been involved in trafficking and
storage of WMD-related capabilities in the past.\textsuperscript{55} Many of these reports indicate that in the early 1990s, Sudan stored nuclear material including fissionable material, documents, weapons sub-systems, and barrels of uranium.\textsuperscript{56} There are also U.S. suspicions that Iraq moved chemical weapons and materials to Sudan for storage prior to the 1991 United Nations’ (UN) inspections.\textsuperscript{57} From 1993 to 1995, suspicion increased that Iraq moved additional chemical weapons to Sudan through Iraq via an “Iraqi-Iranian-Sudanese Axis.”\textsuperscript{58} Although unconfirmed by the UN, Sudanese citizens made claims in the mid-1990s of the Sudanese military’s use of chemical weapons employed in canisters rolled out of the back of aircraft.\textsuperscript{59} Sudan’s history of questionable WMD proliferation activities and possible use of chemical weapons makes them a high risk for availability of both WMD and WMD-related capabilities.

At the peak of Libya’s WMD program, many nonproliferation experts labeled Libya among one of the highest threats for proliferation of WMD in the world.\textsuperscript{60} In the late 1970s, Libya had over 700 personnel, many of which were educated in nuclear science, working in their Soviet Union provided nuclear research reactor.\textsuperscript{61} Experts continued to view Libya as a significant WMD proliferation threat until the Libyan government agreed to dismantle its WMD programs and allow international inspections in 2003.\textsuperscript{62} By 2011, Libya successfully destroyed approximately 54 percent of their chemical weapons stockpile, but the civil war forced them to halt disarmament efforts.\textsuperscript{63} In 2012, Libya submitted their Country Program Framework (CPF) to the IAEA depicting their plan to repurpose nuclear technology and capabilities for economic development.\textsuperscript{64} Libya continued internationally supported destruction of their remaining chemical weapons stockpile in 2013 and completed destruction in early 2014.\textsuperscript{65} Libya’s full
disclosure of their WMD programs, leading to full dismantlement of their chemical program, and the IAEA approved plan to repurpose their nuclear program has been pointed out by the U.S. government as an example for non-compliant countries to follow.66 Due to Libya’s disclosure and dismantlement of their WMD programs and the level of intelligence the U.S. has on Libya’s WMD program activities, Libya is a low-to-moderate risk for the availability of WMD and WMD-related capabilities.

The U.S. suspects Ethiopia of having a chemical weapons program since the 1970s and there are undocumented allegations of Ethiopia’s use of incapacitating agents against Eritrea and Somalia in the mid-1970s.67 Also concerning is the fact that Ethiopia continues to uncover containers of mustard gas left over from the 1930s Italian occupation, the latest discovery being in 2001.68 The lack of U.S. knowledge about Ethiopia’s WMD program and allegations of chemical weapons use make them a moderate risk for availability of WMD-related capabilities.

South Africa decommissioned its WMD programs in the early 1990s.69 Although South Africa is a CWC, BWC and NPT signatory, past events pertaining to South African proliferation activities are cause for continued U.S. and international concern.70 Two of the most significant confirmed proliferation events to occur in South Africa are South Africa’s connection with the A.Q. Khan nuclear supply network and the “Goosen Case” pertaining to South African biological weapons supply networks.71 The A.Q. Khan events centered on the arrests of South African and German executives and engineers. Those arrested were suspected of knowingly manufacturing centrifuge parts and related materials in South Africa for a Libyan uranium enrichment plant.72 The “Goosen Case” centered on the illegal actions of Dr. Daan Goosen, a former South African biological
weapons program scientist in 2002. Dr. Goosen along with several other South African scientists retained biological agents with the intent to sell the agents to “the highest bidder.” After receiving several offers from potential foreign investors, Dr. Kaan offered the agents to the U.S. Federal Bureau of Investigation in exchange for five-million dollars and immigration permits for him and his associates. With South Africa’s past WMD program and WMD-related capability proliferation activities they are a high risk for the availability of these capabilities.

Industrial and Dual-use Concerns

The U.S. concern about Africa’s industrial dual-use capabilities stem from the possible misuse of emerging science and technology, dual use facilities, material and knowledge to enable WMD-related capability acquisition and proliferation. Dual-use facilities, materials and knowledge are those intended for use in medicine, agriculture, energy, and manufacturing that actors of concern could use for illicit production of biological and chemical weapons. One rising concern among scientists and threat analysts is the potential for development of biological weapons due to continued improvements and understanding in the life sciences. Advances in chemistry and genetics pose an increased risk in developing a biological weapon with commercially available technology, materials and knowledge of basic life processes. There are also concerns about the use of industrial chemicals either as stand-alone agents or as precursors for the development of chemical agents.

Another concern is Africa’s uranium ore mining. Commercial mining of Africa’s substantial mineral resources are a significant contributor to Africa’s economic development. Several African countries already conduct uranium mining with many other countries expected to begin in the years to come.
potential for loss or theft of Uranium Ore Concentrate (UOC) either during mining, while in transit or in storage. UOC contains levels of uranium oxide needed for the beginning process of uranium enrichment and would be a valued WMD-related capability if acquired by actors of concern. Inadequate government and commercial oversight and security of these industrial and dual-use facilities, materials, and technology can increase the risk of WMD-related capabilities being available for those that desire to acquire them.

**Oversight and Security**

The previously discussed WMD programs, WMD-related capability proliferation activities, and industrial concerns are magnified when there is a lack of government and commercial oversight and security. Two examples of this issue are some of the African countries’ failure to implement UNSCR 1540 and their lack of membership in the Nuclear Suppliers Group (NSG).

In 2004, the United Nations Security Council (UNSC) adopted UNSCR 1540 to address international concerns over the potential for actors of concern acquiring WMD-related capabilities. The goals set forth in Resolution 1540 are for states to reduce non-state actors’ ability to acquire WMD-related capabilities and the development and implementation of state controls over these capabilities. UNSCR 1540 also requires States to submit an annual report on steps they have taken to implement the resolution’s requirements, plans for further implementation, and issues with implementation. Of the six African states discussed earlier in this paper, none has submitted a report to the UNSCR 1540 Committee since Ethiopia’s report in 2011. Sudan’s last report was in 2009. Algeria, Egypt, and Libya reported last in 2008, and South Africa submitted their last report in 2007. A large portion of African states do not
put a high priority on implementing the resolution’s requirements. Most African
governments are either unable or unwilling to implement due to issues they perceive as
higher priorities.\textsuperscript{90}

Mining of uranium comes with the risk of loss, theft and proliferation of UOC. If
mining companies and state governments do not adequately monitor and secure it
during the actual mining process, transportation and while in storage, this risk is greatly
increased.\textsuperscript{91} The Nuclear Suppliers Group (NSG) is an international group of
participating states that develop, coordinate and implement controls on nuclear items to
reduce the risk of proliferation.\textsuperscript{92} Unfortunately and of concern to the non-proliferation
community, with exception of South Africa, none of the African countries are members
of the NSG.\textsuperscript{93}

These identified areas of concern demonstrate the risk of WMD-related
capabilities being available within Africa. This availability could be of interest to actors of
concern with the desire to acquire such capabilities. Their primary focus would then be
on finding an opportunity.

Africa’s Fragile States (Opportunity)

Some critics argue that the risk presented from African fragile states is on the
decline. Over the past 15 years, African experts have often referred to the continent as
“emerging, rising and hopeful.”\textsuperscript{94} In 2000, The Economist referenced Africa as the
“Hopeless Continent.” In 2011, The Economist referenced Africa as a “Rising
Continent”, and in 2013, the same magazine published an article referring to Africa as
the “Hopeful Continent.”\textsuperscript{95} The positive outlook for Africa from “hopeless” to “hopeful” in
a little over a decade may bring some experts to assume there are few African issues
that should be of U.S. interest. This however would be a false assumption. Africa’s
fragile states present an opportunity for WMD-related capability proliferation that should remain a U.S. national security concern.

Many African states continue to be plagued with numerous social, economic, political and security issues. The Fund for Peace *Fragile States Index 2014* lists South Sudan, Somalia, Central African Republic, Congo Democratic Republic and Sudan as the five most fragile states in the world, putting them on “Very High Alert.”96 The 2014 index lists none of the 54 African countries as stable. The Brookings *Global Economy and Development Index of State Weakness in the Developing World* present some of the same issues. Brookings lists Somalia, Congo Democratic Republic, Sudan, Central African Republic, Zimbabwe, Liberia, and Cote D’Ivoire as seven of the ten weakest states in the world.97 Sierra Leone, Ethiopia and the Congo trail not too far behind falling into the bottom twenty weakest states in the world.98

The concern over Africa’s instability presenting opportunities for actors of concern to acquire available WMD-related capabilities is not only a concern in the previously listed WMD states. The broader concern pertains to African governments unable to maintain control over their territories and borders creating an environment enticing to criminal activity and terrorist organizations.99 The Fund for Peace states, “15 of the world’s 20 most vulnerable states are in sub-Saharan Africa. Among them are countries confronted with the emergence of non-state terrorist groups.”100 In addition to state vulnerability, governmental corruption within a large majority of African countries contributes to the continent’s economic, political, social and security issues. Corruption also threatens national and international security, creating space for organized crime and terrorist groups to flourish.101 In line with the previously depicted failing states index,
Transparency International’s 2013 *Corruption Perceptions Index* lists 49 African countries as having high levels of corruption in the public sector.\(^{102}\)

Some countries within Africa, more specifically border areas between weak states where governments do not adequately monitor or govern, present a significant opportunity for WMD-related capability proliferation. These areas provide individuals, groups, and organizations with access to these capabilities the opportunity to link with actors of concern. The risk then becomes actors of concern taking advantage of these opportunities, acquiring WMD-related capabilities, and developing a WMD for use against the U.S., allies and partners.\(^{103}\)

**Shrinking Space for WMD Proliferation in Africa**

During the 2014 United States Military Academy Commencement Ceremony, President Obama remarked about “shrinking space for terrorism”. As an addition to that concept, this paper provides a recommendation to “shrink space” for WMD-related capability proliferation within Africa. The recommendation builds off of an already established National Security Council (NSC) and Interagency System.

As this paper describes, Africa’s failed and failing states present an opportunity for actors of concern to acquire WMD-related capabilities. The availability of these capabilities in some portions of Africa stems from past program and proliferation activity, industrial and dual-use capabilities, and lack of adequate security and oversight. As none of these fall squarely in the realm of security, diplomacy or development alone, there is a need to provide a “whole of government” approach to address these issues. This approach should include NSC guidance to the Department of State (DOS), the United States Agency for International Development (USAID) and DOD.
Former Commander, United States Africa Command (CDRUSAFRICOM), General Kip Ward viewed the military’s role in Africa as a “three-pronged” approach – Diplomacy, Development, and Defense (3D).\textsuperscript{104} GEN Ward viewed DOD’s AFRICOM as the lead in addressing Africa’s security issues but a supporting role to the DOS and USAID for diplomacy and development within the Continent.\textsuperscript{105} Although the establishment of leading and supporting roles is important; more important is understanding how each area supports and relies on the other. For collaborative, “whole of government” planning, the “3Ds” need a clearly identified and understood problem, a prioritized threat, and nationally established strategic objectives. A common picture of the problem and understanding of the strategic objectives will help each to ensure alignment of ends, ways and means to facilitate unified action and reduction in redundancies.\textsuperscript{106} With minimal adjustment to the already established NCS and Interagency system, this critical information can be provided to support collaborative “3D” planning. To better understand the relationships between the key U.S. stakeholders in this effort, it is important to understand the NSC structure along with DOS, USAID and DOD planning constructs.

National Security Council and Interagency System

The National Security Council (NSC) is the President’s primary forum for the development of national security policies and guidance.\textsuperscript{107} In 2008, President Obama published Presidential Policy Directive-1 (PPD-1), \textit{Organization of the National Security Council System}, outlining procedures for assisting him in his national security responsibilities.\textsuperscript{108} The structure that makes up the National Security Policy Process is the NSC, the NSC Principals Committee (PC), the NSC Deputies Committee (DC) and a variety of NSC regional and functional Interagency Policy Committees (IPCs).\textsuperscript{109}
The PC is chaired by the National Security Advisor (NSA) and is the most senior interagency group. The PC is charged with reviewing policy recommendations provided by subordinate interagency groups and providing the necessary guidance for further analysis or implementation. The DC is subordinate to the PC and is charged with providing direction and oversight of the IPCs and ensuring policy issues are properly prepared for DC level consideration. Subordinate to the DC, are a variety of regionally and functionally aligned IPCs. IPCs are interagency working groups established as primary forums for interagency deliberation and coordination. This author suggests this already established system can help guide “3D” planning to “shrink space” for WMD-related capability proliferation in high risk areas of Africa.

The National Security Council Staff (NSCS) should establish a subordinate Interagency Policy Committee (sub-IPC) charged with four key tasks. First, the sub-IPC should assess and validate Africa’s WMD-related capability proliferation threat and recommend through the DC to the PC, inclusion of this threat in U.S.-Africa policy. Currently, U.S. policy toward Africa is focused on democracy, economic growth, conflict mitigation and prevention, Presidential initiatives, and transnational issues. Inclusion of Africa’s WMD-related capability proliferation threat in U.S. policy will increase U.S. and international interest and investment in the issue. Second, the sub-IPC should prioritize the WMD-related capability proliferation threat by country. Prioritizing African countries by highest proliferation threat could be accomplished using several different criteria. Example criteria include prior and current WMD program/proliferation history, country stability, current unrest, known or suspected terrorist activity, UNSCR 1540 compliance, NSG membership, and weak or failing border countries. Each African
country could then be assessed for threat of WMD-related capability proliferation and prioritized accordingly. Third, review current and planned DOD, DOS and USAID Security Cooperation (SC), Building Partner Capacity (BPC), and regional/country development efforts in Africa to identify redundancies, shortfalls, and unnecessary activities. The questions the sub-IPC should ask include; what is the U.S. and international community doing to address this threat? Are their redundancies or gaps? Are we doing the right things? Are we doing enough? Are we doing it in the right places? Do we need to do more or less, and if so, more or less of what? Lastly, the sub-IPC should provide their analysis, prioritization and recommendations to the Diplomacy, Development and Defense Planning Group (3DPG) to inform their planning.\footnote{115}

The sub-IPC should consist of functional subject matter experts in the areas of CWMD, intelligence, and counter-terrorism and should also include Africa regional experts from DOS, DOD and USAID. This sub-IPC can be subordinate to either the already established regional Africa IPC or the functional Weapons of Mass Destruction – Terrorism (WMD –T) IPC.\footnote{116} This prioritization and guidance from the sub-IPC will help to inform “3D” planning and facilitate alignment, synchronization, and collaboration of a “whole of government” approach to Africa’s WMD related capability proliferation threat. Diplomacy, Development, and Defense Planning

The DOS, USAID and DOD provide the “…foundation for promoting and protecting U.S. national security interests abroad.”\footnote{117} DOS planning is based off of strategic direction from the NSS and the Quadrennial Diplomacy and Development Review (QDDR), as well as input from the DOS Country Teams.\footnote{118} For each country, DOS develops Integrated Country Strategies (ICSs) which are three year documents
developed by each embassy’s Country Team. The ICS identifies U.S. foreign policy and development priorities for each country.\textsuperscript{119}

USAID develops Country Development Cooperation Strategies (CDCS) tailored to address the needs and challenges in each country.\textsuperscript{120} The CDCS is coordinated with the host nation and is intended to align U.S. efforts with host nation and international programs ongoing in a specific country.\textsuperscript{121} The core principles of the CDCS include supporting U.S. foreign policy priorities, strategic alignment with host country developmental priorities, and defining clear objectives for each country.\textsuperscript{122}

DOD planning is based off of strategic direction from the NSS, the National Defense Strategy (NDS), Guidance for the Employment of Forces (GEF), and the Joint Strategic Capabilities Plan (JSCP).\textsuperscript{123} The JSCP directs each Geographical Combatant Commander (GCC) to develop a theater strategy and a Theater Campaign Plan (TCP). A TCP “operationalizes” a GCCs theater strategy and is the key document for development and implementation of security cooperation efforts within the GCC’s assigned theater of operations.\textsuperscript{124} The TCP along with the GCC’s country-level plans assist them in establishing the key activities and means needed to achieve country specific objectives.\textsuperscript{125}

“Integrated interagency planning is intended to create unity of purpose and effort...to better combine a whole of government approach...”\textsuperscript{126} Unity of effort is based off of four driving principles; common understanding of the situation; common vision; coordination of efforts; and common measure of success and adaptability. The information and guidance provided by the sub-IPC will assist each key stakeholder in
diplomacy, development and defense to collaboratively align ways and means to achieve strategic ends.\textsuperscript{127}

In the area of “shrinking space” for WMD related capability proliferation in Africa, the unified purpose and efforts are to achieve DOD’s objective of “no new WMD possession.” Implementation of a sub-IPC at the NSC level, focused on Africa’s WMD-related capability proliferation threat, can facilitate provision of critical information needed for “whole of government” planning using already established processes and procedures. This process would allow the U.S. and international partners to focus limited resources and align ways in the most high risk areas of Africa to prevent WMD-related capability proliferation within and from Africa.

Conclusion

The Continent of Africa potentially presents the U.S. and the international community with its greatest WMD proliferation challenge of the 21st Century; the intersection of availability of WMD-related capabilities; the desire of actors of concern to acquire these capabilities; and an opportunity for them to do so. Availability of these capabilities within some African states stems from their past program history, industrial and dual-use capabilities, and a lack of oversight and security of these capabilities. The Opportunity for actors of concern to acquire available WMD-related capabilities stems from Africa’s failed and failing states. To ensure the U.S. achieves the DOD end state of “no new WMD possession,” the U.S. must implement a “whole of government” approach to address the WMD-related capabilities proliferation threat presented within Africa. This paper suggests the NSC stand up an “Africa WMD sub-IPC” to assess the regional threat; prioritize the threat by African country; review current and planned “3D” actions for gaps and redundancy; and provide this information to the 3DPG community to inform
their planning. Some critics argue terrorists will not use WMD. Others argue WMD proliferation in Africa should not be a priority. Whatever the risk may be, identifying and prioritizing the threat and collaboratively aligning ways and means for unified action to counter the threat of WMD acquisition and use is paramount. The repercussions of not addressing it are too severe.

Endnotes


5 “No new WMD possession” is one of three end states provided in DOD’s CWMD strategy and is advanced through the “Prevent Acquisition” Line of Effort (LOE). Hagel, Department of Defense Strategy for Countering Weapons of Mass Destruction, v.


8 Ibid.


15 Ibid.


17 Ibid., 33.


19 Ibid., 17-18. Definition was derived from Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, 8 November 2010 (As Amended Through 15 January 2015), 264.

20 Ibid., 18.

21 Ibid., 3-4.

22 Ibid., 17.
Development of the DOD strategy to Counter Weapons of Mass Destruction was a whole of government collaborative effort lead by the Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction. Significant support in the development of this strategy was provided by Joint Staff, J5, Deputy Directorate for Strategic Stability, Countering Weapons of Mass Destruction Division.


Ibid.

Ibid., i.

Ibid., Chairman Joint Chiefs of Staff Cover Letter.

Ibid., 4.


Provided by Gary Ackerman, Center for Nonproliferation Studies, Monterey Institute of International Studies as a key point in his discussion paper deriving from a conference on non-state actors, terrorism, and weapons of mass destruction on October 15, 2004. Blum, Asal, and Wilkenfeld, ed., “Non-state Actors, Terrorism, and Weapons of Mass Destruction,” 142.


Ibid.

Provided by Jerrold M. Post, Elliott School of International Affairs, George Washington University as a key point in their discussion paper deriving from a conference on non-state actors, terrorism, and weapons of mass destruction on October 15, 2004. Ibid., 148.
Provided by Ted Robert Gurr, Department of Government and Politics, University of Maryland as a key point in their discussion paper deriving from a conference on non-state actors, terrorism, and weapons of mass destruction on October 15, 2004. Ibid., 145.

Ibid.


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Ibid.


Ibid.

Ibid.
Piombo, *Ungoverned Spaces and Weapons of Mass Destruction in Africa: Exploring the Potential for Terrorist Exploitation*, 19. Piombo states that South Africa has operational nuclear energy plants and uranium stores in its territory. There are lingering concerns regarding the potential to exploit dual-use technologies in this industrialized country, and regarding the potential sale of chemical weapons that have evaded the control of the current regime.


Ibid., 1.

Ibid., 2.


Ibid., 3.

Ibid. Anthony and Grip point out that South Africa is the only African country that participates in the NSG. Most of the significant UOC suppliers that are not members of the NSG are in Africa.

Banks et al., Top Five Reasons Why Africa Should Be a Priority for the United States, 1.

Ibid.

Haken et al., Fragile States Index 2014, 4.

Rice and Patrick, Index of State Weakness in the Developing World, 10.

Ibid., 11.

Banks et al., Top Five Reasons Why Africa Should Be a Priority for the United States, 3.

Ibid., 8-9.


Ibid.

Unified Action is defined as “The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort.” U.S. Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms, Joint Publication 1-02 (Washington, DC: U.S. Joint Chiefs of Staff, November 8, 2010), 256.

Provided examples of regional IPCs consist of Europe and Eurasia, Western Hemisphere, Iran, Syria, Africa, Russia, and Iraq. Examples of functional IPCs consist of Arms Control, Combating Terrorism Information Strategy, Proliferation Strategy, Counter-proliferation, and Homeland Defense, Weapons of Mass Destruction – Terrorism, and Avian and Pandemic Influenza.


Regional IPCs may include department or agency members with functional expertise, and functional IPCs are likely to include regional experts. Regional IPCs normally are headed by Assistant Secretaries of State while functional IPCs are headed by senior department officials or NSS Senior Directors. Alan G. Whittaker et al., The National Security Policy Process: The National Security Council and Interagency System (Research Report, Annual Update) (Washington, DC: Industrial College of the Armed Forces, National Defense University, U.S. Department of Defense, August 15, 2011): 17-18.


USAID advances foreign policy objectives by supporting a countries/regions economic growth, health, democracy, conflict prevention and humanitarian assistance.
All ten of CDCS’s core principles are: Supports U.S. foreign policy priorities; Defines a Goal, Development Objectives, Intermediate Results, and Performance Indicators through a Results Framework and supporting narrative based on evidence and analysis; Advances USAID’s Policy Framework for 2011-2015, Agency-level policies and strategies, Presidential Initiatives, and USAID Forward; Ensures strategic alignment with host country development priorities and promotes mutual accountability; Takes into account the needs, rights, and interests of the country’s citizens; Focuses on achieving prioritized development results that have clear and measurable impacts; Communicates Mission needs, constraints, and opportunities; Defines associated human, budget, and physical resource priorities; Serves as the basis for the annual Mission Resource Request, Congressional Budget Justification, and other assistance planning, budgeting, and reporting processes and; Represents the first step in USAID’s Program Cycle, providing the strategic basis for project design and implementation, monitoring and evaluation, learning and resource allocations.

Country-level plans establish concepts, activities and resources required to achieve the GCC’s objectives for that country. Like the TCPs, country plans are in the process of maturing to meet the needs of each GCC theater strategy, but they should establish the concepts by which GCC objectives for each country are to be achieved and to the extent that there are common objectives, complement the activities of State and USAID.