

The Interagency’s “WMD” Terminology Problem

by Alexi Franklin

The terms “weapons of mass destruction (WMD),” “chemical, biological, radiological, and nuclear (CBRN),” and “chemical, biological, radiological, nuclear, and explosives (CBRNE)” are found throughout the interagency, and they are treated essentially as synonyms. In important ways, however, these terms highlight differences with both conceptual and policy ramifications. Moreover, their incautious use risks, at a minimum, hampering interagency coordination for preventing and responding to potential CBRNE-related incidents and unwittingly misleading private citizens, first responders, politicians, and policymakers about the capability and capacity of the nation’s WMD and CBRNE defenses. Thus, while it may be argued that all three terms have their place, that argument must be accompanied by the realization that they are not strictly interchangeable, and terminological sloppiness on this point has potentially significant ramifications for the interagency.

Lack of Clarity Across the Interagency

The U.S. government’s legal definition of “weapon of mass destruction” includes “any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors; any weapon involving a biological agent, toxin, or vector . . . or any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.”¹ The definition also includes “any destructive device,” which is further defined as “any explosive, incendiary, or poison gas, bomb, grenade, rocket . . . , missile . . . mine, or [similar device]; any type of weapon (other than a shotgun . . .) [with a] barrel with a bore of more than one-half inch in diameter,” and any combination parts that can be used to convert or create a “destructive device.”² Conversely, the *Department of Defense Dictionary of Military and Associated Terms*, defines WMDs as “chemical, biological, radiological, or nuclear weapons capable of a high order of destruction or causing mass casualties and excluding the means of transporting or propelling the weapon where such means is a separable and divisible part from the weapon.”³

U.S. Army Major Alexi Franklin is the Mobilization Readiness Officer, G3, Maryland Army National Guard. He received a M.S. in WMD Studies as a National Defense University Countering WMD Graduate Fellow.

The significant difference between the two is the legal definition's inclusion of "destructive devices" as WMD.

No one agency is tasked with countering WMD, but many claim that countering them is one of their primary missions. However, even individual agencies use references to WMD in confusing if not contradictory ways. Consider the following examples:

- According to the U.S. Army Chemical, Biological, Radiological, and Nuclear School, the Army's Chemical Corps mission is to "[conduct] CBRN operations in order to protect the force and the Nation from WMD/CBRN threats and hazards."⁴ The primary problem with the mission statement is that it conflates WMD and CBRN. They are not the same, as not all chemical, biological, radiological, or nuclear "threats and hazards" are massively destructive. (In a related vein, "operations" is likely far too general a term to describe the Army's Chemical Corps' CBRN-related responsibilities. A statement focusing on consequence management or CBRN "defense" would provide a greater degree of clarity as to what capability the Army actually provides.)

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- The State Department's Office of Weapons of Mass Destruction Terrorism defines its mission as working with foreign partners to "counter the threat of terrorists acquiring and/or using a weapon of mass destruction" and "to deter, detect, defeat, and respond to terrorist attempts to acquire or use chemical, biological, radioactive, or nuclear materials."⁵ In this instance, if the list of

threats is restricted purely to CBRN threats, the utility of using the separate term WMD is negligible.

- In contrast, the Department of Homeland Security (DHS) defines WMD as "a nuclear, radiological, chemical, biological, or other device that is intended to harm a large number of people."⁶ The existence of a hypothetical "other device" undoubtedly grants DHS leeway to manage emerging technological threats. However, it also produces potential policy ambiguities: For example, it raises the specter that State Department agreements with foreign partners may not include devices or capabilities that DHS considers to be WMD.
- The Department of Energy's National Nuclear Security Administration lists as its responsibility to "reduce the global danger from weapons of mass destruction." However, this begs the question of whether the National Nuclear Security Administration seeks to combat all categories of WMD, or whether it has the responsibility to prevent, as its name implies, only the spread of nuclear weapons.⁷ If the National Nuclear Security Administration seeks only to accomplish the latter, referring to WMD only succeeds in providing a lack of clarity.
- The U.S. Department of Health & Human Service's Domestic and Foreign Emergency Support Team Program consists of deployable teams that "provide expert advice, guidance, and support during a weapon of mass destruction (WMD) or CBRNE crisis or incident."⁸ Phrased thus, presumably WMD and CBRNE pose two distinct threats.
- While Joint Task Force Civil Support, a subordinate unit of U.S. Army North, does

not use WMD in its mission statement of “managing the consequences of a chemical, biological, radiological, nuclear, or high-yield explosive (CBRN) incident,” this definition includes the “E” category (high-yield explosives) without then using the term CBRNE.

Though some of the inconsistencies noted above might be considered rhetorical, esoteric, or pedantic, the fact remains that there is a lack of clarity across the interagency as to what WMD actually is.

WMD May be a More Useful Reference than CBRNE

Despite the broad nature of the generally-agreed-upon categories of WMD, not all CBRNE threats have mass outcomes. For example, a chemical weapon might not produce as great a mass effect as does a non-chemical explosive device that can blanket a similarly-sized target area, such as a “cluster” bomb. In contrast, a strategic nuclear weapon can result in the deaths of hundreds of thousands of people, while a tactical nuclear weapon may produce a comparatively small effect. A radiological dispersion device, or “dirty bomb,” might contaminate an area but would not be any more overtly destructive than the same bomb manufactured without radiological material. Another kind of radiological weapon, the radiological exposure device, can only harm human and other forms of life directly in front of the weapon. Nuclear weapons can be optimized to release a powerful electromagnetic pulse, damaging electrical equipment without directly harming individuals. Biological weapons run the gamut from extremely contagious smallpox virus to non-transmissible ricin.

Reference to CBRNE is often invoked to identify the collective danger posed by non-kinetic threats, even though no weapon yet devised has greater kinetic effects than certain nuclear weapons. On the other hand,

some CBRNE weapons are not what could be considered as kinetic weapons at all—for example, chemical and biological agents. The greatest source of commonality among these various weapon modalities may have little at all to do with how massive their effects are. Rather, it may be the fact that defeating CBRNE weapons requires advanced technical detection, protection, and mitigation. For example, the Army’s primary function with regard to WMD is actually in the consequence management of specific CBRNE threats. By the same token, not all security issues involving CBRNE weapons are defensive. Indeed, for the U.S., nuclear weapons involve significant defensive and offensive planning considerations. Thus, in the case of nuclear weapons, WMD might be a more useful reference than CBRNE—especially when ambiguity becomes a policy virtue.⁹

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Budgetary Imbalance

Countering-WMD programs receive significant funding across the interagency, but this funding varies in disproportionate ways. While there is an uncertain likelihood of a biological or nuclear attack occurring, each poses equivalent levels of potential damage.¹⁰ However, the distribution of funding has not matched this potential equivalence. For example, the DHS’s fiscal year 2018 budget request included over \$330 million for radiological and nuclear threats, while only \$111 million for chemical and biological threat programs.¹¹ Moreover, funding directed at defense against a specific modality may provide a false sense of national security, since, for example, the personnel, training, and equipment fielded to counter nuclear or radiological weapons-use

have limited utility beyond mitigating an overt attack. Similarly, nuclear defensive systems and the personnel trained to use them have limited applicability for responding to an incident at nuclear power plant.

In contrast, chemical or biological weapons preparedness has the potential for secondary benefits in a general, non-weaponized pandemic or in industrial-accident preparedness. Even so, the Centers for Disease Control and Prevention's fiscal year 2018 budget reduced the Preparedness and Response program, of which chemical and biological weapons are but one of many threats, from \$161 million to \$140 million.¹² While an in-depth budgetary analysis would be required to truly assess the budgetary particulars contained within the amounts set aside for nuclear or biological defense, it is unlikely that the biological warfare threat can effectively be negated at a fraction of the price of the nuclear threat. These types of imbalances become possible when interagency discourse cast its budgetary discourse in terms of defeating WMD rather than in terms of defeating specific CBRNE threats.

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Cyber Weapons as WMD

Neither WMD, nor CBRNE, nor CBRN successfully captures emerging threats with potentially massive consequences as, for example, cyber weapons. Some have suggested that cyber weapons constitute WMD,¹³ and indeed, cyber weapons and WMD share certain characteristics. For example:

- Both cyber weapons and biological weapons can be deployed in ways that are discreet and insidious and can spread almost

organically from one host to another.

- Chemical weapons are formed from discrete combinations of the periodic table of the elements, while cyber weapons are logical, discrete combinations of computing code.
- The barrier for technical entry can be low for both, raising alarm bells about public access.¹⁴
- States that pose the greatest nuclear threat to the U.S. are also significant cyber powerhouses.
- Finally, the use of nuclear and cyber weapons can have devastating consequences on a similar grand scale.¹⁵

While the biggest distinction between cyber weapons and WMD is the lack of direct physical harm posed by cyber weapons, direct risk is not necessarily the defining feature of CBRNE weapons.¹⁶ A persistent chemical weapon, such as the nerve agent VX, can be used for terrain denial; a biological weapon can destroy crops; or a bomb can be detonated only after the authorities have been alerted and citizens have been evacuated. In contrast, using a cyber weapon to disable a hydroelectric dam can pose an acute threat to critical infrastructure that could result in mass civilian casualties.

Definitions Evolve

Granted, definitions can and do change over time. When the Archbishop of Canterbury first coined the phrase “weapons of mass destruction” in 1937,¹⁷ he may well have intended it to describe massive aerial bombardment during the Spanish Civil War. Today, however, few would consider conventional aerial bombardment to be WMD. This is primarily due to historical context. In the context of 1937, aerial bombardment was not a feature of the war the archbishop, other Britons, and Europeans remembered most closely—the Great War. In that respect, “weapon of mass

destruction” possibly served more often than not as a rhetorical device intended to capture a certain novelty or uncommon nature of a weapon. To an extent, this rhetorical characteristic persists unto the present: The novelty of a weapon and its perception as a WMD is reflected in the weapons that civilian law enforcement agencies classify as WMD that the military does not. For example, the civil legal definition of WMD includes multiple, low-yield explosive devices, but the Department of Defense’s definition does not. Explosions of significant power are the daily work of the Department of Defense (DoD), while such explosions are rarely encountered in civilian life. In this respect, some may consider WMD to be a useful term for broadly describing offensive weapons employment, while at once using CBRNE to refer to defensive acts against specific technical threats. The nonrestrictive definition of WMD allows for flexibility in laws, treaties, and policies. It can include emerging threats, and it can discard categories once a weapon loses its novel nature. That both terms have certain utility is of value to the interagency.

However, that likewise means that conflating the terms as if they were merely a distinction without a difference could be pernicious. The utility of choosing CBRNE over WMD is inversely proportional to a given organization’s or activity’s proximity to defensive, on-ground incident response. At one extreme of nonproliferation efforts, interagency operations might focus on broader, non-technological concepts, such as intent or threat perception. The efforts of diplomatic and intelligence agencies can be general in nature, and hyper-specific focus on a specific CBRNE threat could result in overlooking a novel technical approach or missing actions in an entirely different CBRNE category. In the middle, counterproliferation efforts must combat both specific technologies and technical pathways, as well as generic clandestine proliferation networks. At the far extreme of counterproliferation, aspirations

toward general WMD preparedness can cause specific capability gaps that hamper an interagency response post-attack.

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Nonproliferation, Counterproliferation, and Consequence Management

Until 2014, the DoD applied a three-pillar rubric for combating WMD: nonproliferation, counterproliferation, and consequence management. With the release of Joint Publication 3-40, *Countering Weapons of Mass Destruction*, DoD retained the framework of three elements but recast them as three “lines of effort” corresponding to three phases—before acquisition, during possession, and after the use of WMDs.¹⁸ Regardless the name, official DoD doctrine recognizes all three phases as related but distinct from one another. Clear delineation among these three lines of effort allows the appropriate interagency organizations to leverage the instruments of national power, through expertise in discrete capabilities, to be of service in combatting WMD writ large. Using the terms WMD or CBRNE has utility to varying degrees in each of these three areas. Judicious use of terminology in each of the three areas will help further interagency anti-WMD efforts as much as imprecise use can hamper it.

Nonproliferation is the act of implementing policies and procedures to hinder or prevent WMD acquisitions by “dissuading or impeding access to, or distribution of, sensitive technologies, material, and expertise.”¹⁹ Nonproliferation actions can include enforcing international agreements to control the sale of sensitive material or gathering and sharing

intelligence to identify potential proliferates. The majority of this activity is diplomatic and involves government policy, industry, and the intelligence community. For example, the State Department's Proliferation Security Initiative has led to the interdiction of WMD materials headed to Libya, while the Commerce Department helps maintain export control lists.²⁰ Here, the use of the term WMD is potentially preferable to CBRNE, as WMD can be used euphemistically to mask the exact nature of a threat for diplomatic or intelligence purposes or to include foreign personnel and entities from acquiring technology that can aid in the development of cyber warfare or other emerging WMD-like threats. In fact, CBRNE might prove positively unhelpful for nonproliferation efforts, as interagency efforts may become "stove-piped" by threat category, rather than focused on more general targets such as global networks or threat actor intent.

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Counterproliferation efforts focus on mitigating the effects of existing weapons and the dangers they pose. Counterproliferation actions can include active medical surveillance to provide early warning of a biological weapons attack or seizing and destroying a chemical weapons stockpile of another nation. These activities involve the coordination of the intelligence community and law enforcement and, on occasion, military support. Here, WMD is a less useful term as the development of threat-specific countermeasures necessarily drives interagency efforts towards category-specific CBRNE responses. However, much like with nonproliferation, referring to WMD in lieu of CBRNE may have benefits for diplomatic purposes. For example, within the intelligence

community, it may encourage a broad, global view in lieu of a narrow technical one or protect sources and methods with purposefully vague public terminology.

Consequence management is essentially reactive and can include identifying the perpetrator of a WMD attack post-event or cleaning up contamination after a WMD strike. While consequence management is the least desired stage to respond to a WMD threat, the robust ability to respond to threats is the duty of responsible government. However, if interagency entities lack sufficient clarity in communicating their individual capabilities, organizations can wastefully duplicate effort—or worse, allow gaping holes to exist in consequence management plans that fail to identify specific threat modalities. Labeling all CBRNE threats as WMD obscures the ways in which each of the CBRNE threats is significantly different, which can lead to a misallocation of bureaucratic attention and attendant resource allocation. In the realm of consequence management, using the term CBRNE is far more useful than WMD.

Conclusion

Given the continued importance of achieving maximum interagency coordination and cooperation toward the shared goal of defeating CBRNE threats, there are good reasons to use accurate terminology. WMD, CBRN, and CBRNE describe similar, but ultimately distinct, security threats. The interagency should deliberately use direct terminology to help describe what it intends to accomplish. While detractors may view an attempt to distinguish CBRNE from WMD as merely a matter of bureaucratic wordplay, a lack of precision with the terms WMD, CBRN, or CBRNE can have unrecognized, and certainly unintended, consequences of massive proportion. By using WMD to mean CBRNE, local, state, and national-level policymakers may prepare for the wrong threats, putting equal emphasis on

weapons because they are labeled as WMD, as opposed to tailoring their responses to discrete hazards and the scale and scope of danger they actually pose. If a one-size-fits-all term for use across the interagency does not exist—and very likely, it does not, then at very least, those who invoke terms referring to weapons, capabilities, and threats of the kinds discussed above must do so with the utmost appreciation of the need for their careful, thoughtful invocation. **IAJ**

The views expressed in this article are those of the authors and are not an official policy or position of the National Defense University, the Department of Defense or the U.S. government.

NOTES

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