



# DoD Non-Lethal Weapons Program

Joint Non-Lethal Weapons Directorate (JNLWD)



## Joint Armaments Forum, Exhibition, & Technical Demonstration

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# Overview



- DoD Non-Lethal Weapons Program
- Non-Lethal Capabilities Relevance
- Current and Emerging Non-Lethal Capabilities
- Industry Opportunities / Technology Challenges
- Wrap-Up / Questions



# DoD Non-Lethal Weapons (NLW) Program



*“Weapons, devices, and munitions that are **explicitly designed and primarily employed to incapacitate targeted personnel or materiel immediately**, while minimizing fatalities, permanent injury to personnel, and undesired damage to property in the target area or environment. **NLW are intended to have reversible effects on personnel and materiel.**”*



General James F. Amos  
Commandant of the Marine Corps



## DoD NLW Policy:\*

**“ ...expand the range of options available to commanders”**

**“ Enhance the commander’s ability to capture or incapacitate high value targets”**

**“ The availability of NLW will not limit the commander’s inherent right...to exercise unit self-defense”**

**“NLW may be used in conjunction with lethal weapon systems to enhance their effectiveness and efficiency in military operations...”**

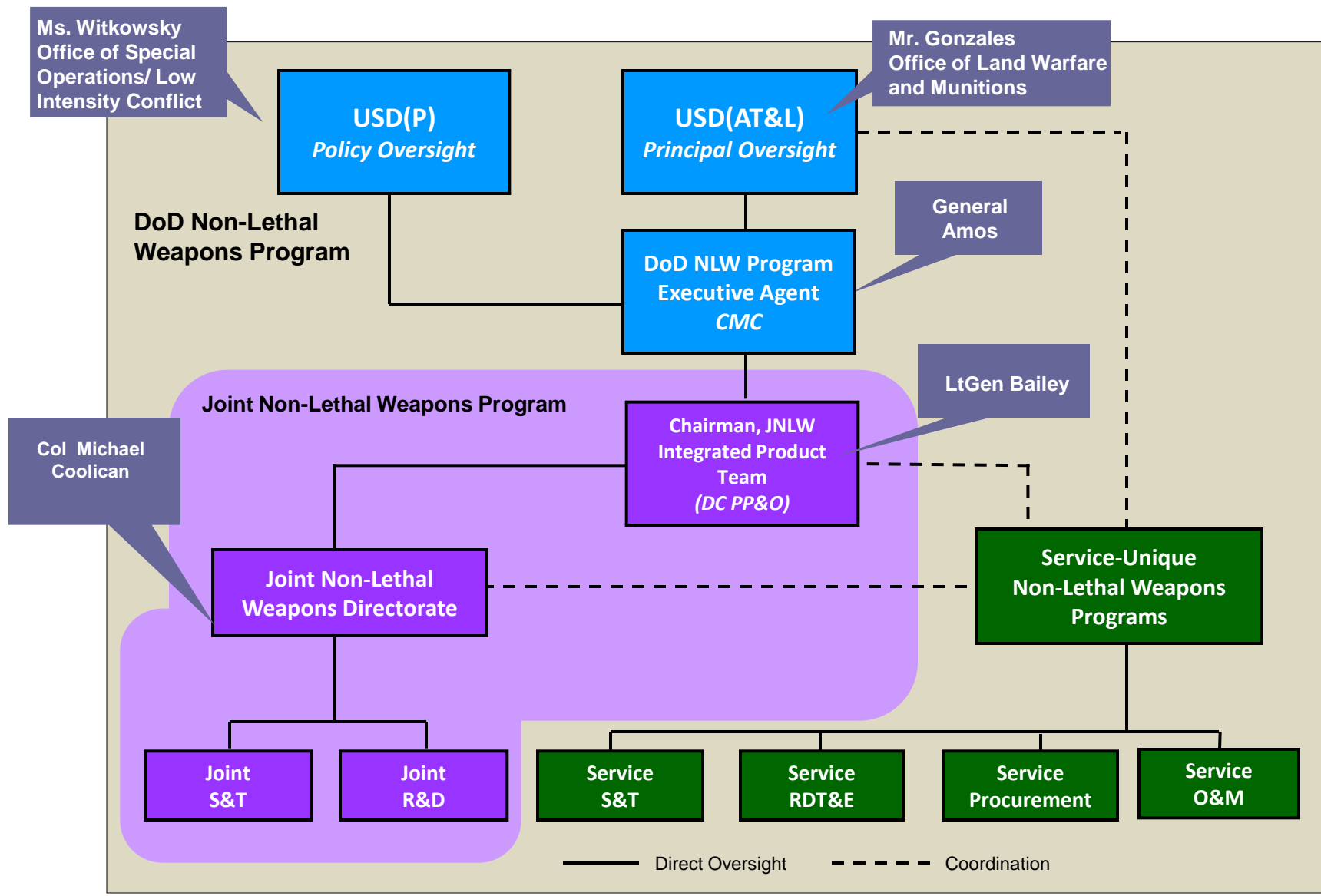
*“Non-lethal effects are part of the Department of Defense portfolio of capabilities that enhance the Joint Force Commander’s ability to act in a timely manner to detect, deter, prevent, defeat, or, if necessary, mitigate effects of an attack.”*

*General James F. Amos  
Congressional Testimony  
March 16, 2011*

\*DoDD 3000.03E, *DoD Executive Agent for Non-Lethal Weapons (NLW), and NLW Policy*

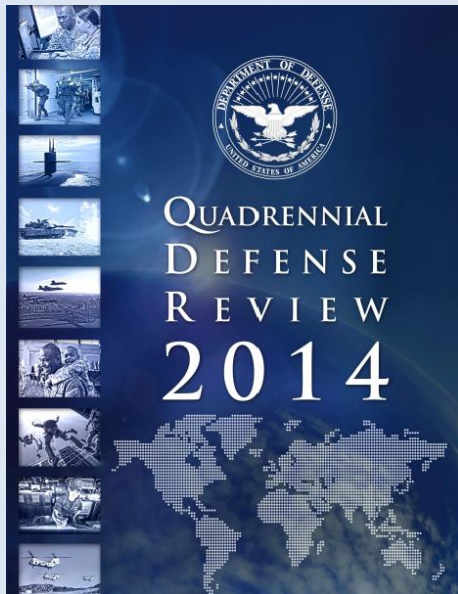


# DoD NLW Program Organization





# Non-Lethal Capabilities Relevance



QUADRENNIAL DEFENSE REVIEW

improvements – significantly mitigating these risks. Overall, the Department can manage these risks under the President's FY2015 Budget plan, but the risks would grow significantly if sequester-level cuts return in FY2016, if proposed reforms are not accepted, or if uncertainty over budget levels continues. It is essential that we work closely with Congress to ensure that, as we put our Nation's fiscal house in order, we provide sufficient resources to preserve our national security.

**BUILDING ON THE DEFENSE STRATEGIC GUIDANCE**

The United States exercises global leadership in support of our interests: U.S. security and that of our allies and partners; a strong economy in an open economic system; respect for universal values; and an international order that promotes peace, security, and opportunity through cooperation. Protecting and advancing these interests, consistent with the National Security Strategy, the 2014 QDR embodies the 21st century defense priorities outlined in the 2012 Defense Strategic Guidance. These priorities include rebalancing to the Asia-Pacific region to preserve peace and stability in the region; maintaining a strong commitment to security and stability in Europe and the Middle East; maintaining a global approach to countering violent extremists and terrorist threats, with an emphasis on the Middle East and Africa; continuing to protect and prioritize key investments in our military forces overall grow smaller and leaner; and increasing efforts to build innovative partnerships and strengthen alliances and partnerships. The 2014 QDR builds on these priorities and incorporates them into its broader strategic framework. The Department's defense strategy emphasizes three pillars:

- *Protect the homeland*, to deter and defeat attacks on the United States and to support civil authorities in mitigating the effects of potential attacks and natural disasters.
- *Build security globally*, in order to preserve regional stability, deter adversaries, support allies and partners, and cooperate with others to address common security challenges.
- *Project power and win decisively*, to defeat aggression, disrupt and destroy terrorist networks, and provide humanitarian assistance and disaster relief.

These pillars are mutually reinforcing and interdependent, and all of the military Services play important roles in each. Our nuclear deterrent is the ultimate protection against a nuclear attack on the United States, and through extended deterrence, it also serves to reassure our distant allies of their security against regional aggression. It also supports our ability to project power by communicating to potential nuclear-armed adversaries that they cannot escalate their way out of failed conventional aggression. Building security globally not only assures allies and

EXECUTIVE SUMMARY

## Defense Strategy Three Pillars:

Protect the homeland

Build security globally

Project power and win decisively





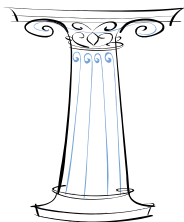


# Non-Lethal Capabilities Relevance (cont.)



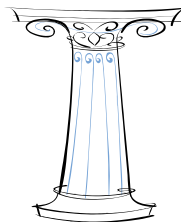
## Protect the Homeland

*Non-lethal capabilities* provide **force application options to protect US citizens and infrastructure** in the event of a catastrophic domestic incident



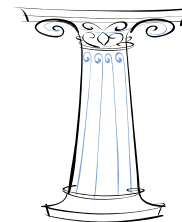
## Build Security Globally

Information exchanges and training exercises involving **non-lethal capabilities** are fundamental part of **DoD's security cooperation efforts to build partner capacity**



## Project Power and Win Decisively

Fully integrated **non-lethal competencies** that enable force application for short of lethal scenarios will **complement** the unmatched and overpowering **lethal firepower** that will always be the hallmark of U.S. forces





# Representative Mission Applications Across the Broad Spectrum of Conflict



Shape ---- Deter ---- Dominate ---- Stabilize ---- Enable Civil Authority

*Foreign Humanitarian Assistance*

*Clearing Structures / Facilities*

*Detainee Operations*

*Noncombatant Evacuation Operations*

*Check-Point / Convoy Security*

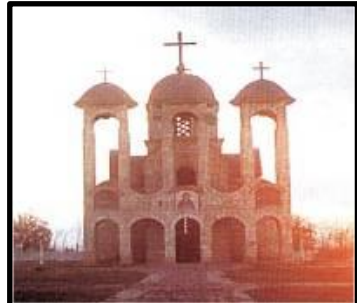
*Perimeter / Area Security*

*Vessel Boarding, Search and Seizure*

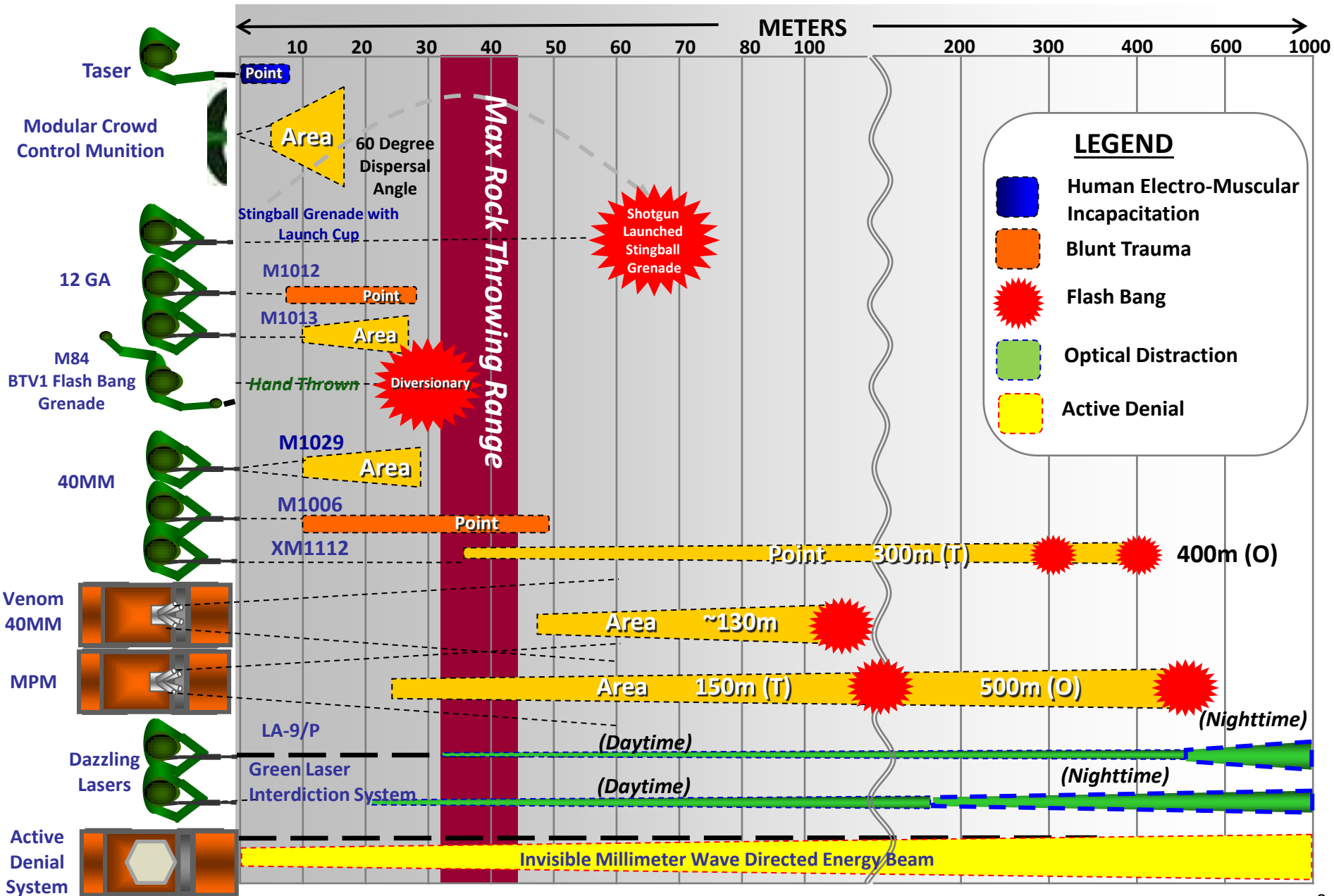
*Vehicle / Vessel Stopping*

*Crowd Dispersion*

Non-Lethal Capabilities provide Force Application **options** for use in proximity to civilians or to deny and preserve key infrastructure.



# NL Weapons, Munitions & Devices Range Overview







# Industry Opportunities



- Considerable **technology challenges** remain in developing next generation non-lethal capabilities
- The JNLWD intends to pursue a **Research & Technology Indefinite Delivery – Indefinite Quantity (IDIQ) Multiple Award Contract**
  - Notional Timeline: Draft Request for Proposals (RFP) – 1st Quarter FY15 with Contract Award(s) – 3rd Quarter FY15
- Publication of a **Broad Agency Announcement** is also imminent

**Check JNLWP website and FedBizOps routinely for updates.**  
**<http://jnlwp.defense.gov>**

*Informational and planning purposes only. Does not bind the Government to contract for any supply or service. Official requirements and instructions would be provided in a final released Request for Proposal (RFP).*



# Illustrative Technology Challenges



- Advanced materials and payloads to non-lethally hail/warn, move, deny area, suppress, and temporarily disable individuals at ranges > 100 meters
- Directed energy technologies with reduced size, weight and cost for vehicle / vessel stopping
- Compact active denial technologies for non-lethal counter-personnel “push-back” or “repel” capabilities
- Clear-a-Space Technologies
- Human Electro-Muscular Incapacitation technologies to disable point targets or multiple targets (open and confined)
- Compact non-pyrotechnic flash-bang and “multi-bang” technologies
- Human Effects and NLW Weapon Effectiveness Studies, Risk Assessments, and Evaluations

**Check JNLWP website and FedBizOps routinely for updates.**  
**<http://jnlwp.defense.gov>**



# Additional DoD Non-Lethal Weapon Program Briefs during the Joint Armaments Forum

- 14 May - *NL/NK Directed Energy Weapons*

Unconventional & Emerging Armaments Program Session

- 14 May - *NLW Human Effects Tutorial*

Unconventional & Emerging Armaments Program Session

- 14 May - *NLW Update*

Small Arms Program Session



# Questions?

<http://jnlwp.defense.gov>