

# NATO 2027: EUROPEAN LEADERSHIP WILL BE KEY TO DETERRENCE AGAINST RUSSIA

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As part of their strategic partnership, the Atlantic Council and MITRE have conducted a NATO Force Mix Analysis, examining ways to harden the Alliance's eastern flank, measure the value of multidomain operations, and deter Russian aggression. This paper was jointly produced by the Atlantic Council and MITRE.

# **EXECUTIVE SUMMARY**

NATO remains superior in numbers and technology to Russia on paper. However, it lacks the operational integration, logistics, and joint force capabilities needed to quickly counter Russian mass and tempo near its borders. How can the Alliance achieve overmatch in 2027 without overreliance on U.S. military might?

NATO faces a growing threat from a resurgent Russia capable of hybrid and kinetic aggression across the Northeast Corridor—from Finland, the Baltic region, and Poland to the Black Sea. Currently, NATO's defense posture relies heavily on U.S. military support for intelligence, surveillance, and reconnaissance (ISR), strategic lift, command and control (C2), and the extended deterrence provided by the U.S. nuclear umbrella. With the United States increasingly focused on the Indo-Pacific region and committed to burden sharing, and with growing calls for European strategic autonomy, NATO must be able to deter and respond to threats as a unified entity—one not effectively dependent on U.S. warfighting capability and capacity. Regardless of spending levels, NATO must shift from a national-centric approach to an Alliance-wide mindset. This requires a shared engineering and analytics methodology to optimize defense resource allocations with a focus on speed, precision, and collaboration.

To assess the transatlantic geostrategic environment and explore strategic options available to NATO, MITRE and the Atlantic Council have partnered to conduct a NATO Force Mix Analysis (NFMA). The findings of this analysis call for accelerated capability development, institutional reform, and operational integration under a forward-leaning, data-driven, mission-engineering framework. This framework would enable NATO to make data-informed decisions to adaptively evolve its multi-domain warfare concepts, improve force design decision making, and optimize investments to deliver integrated capabilities that produce the best mission effects required for operational success. Specifically, the NFMA can support NATO in the following ways:

- Adaptively evolve concepts, operational decision making, and assignment of authorities toward more effective strategic outcomes.
- Optimize funding investments and deliver unified capabilities that produce the best mission effects required for operational success.
- Effectively leverage technology to achieve mass.

By 2027, NATO must strengthen the Baltic Defense Line. Timely action is required to ensure credible deterrence, reassure frontline allies, and deny Russia any opportunity to test NATO's resolve or readiness in a high-threat environment. To achieve this, the following actions are essential:

- Prepare a warfighting burden-sharing roadmap.
- Establish a unified NATO multidomain warfare doctrine.
- Invest in multidomain C2 and ISR infrastructure.
- Establish a NATO multidomain open system architecture.
- Accelerate forward posture of heavy forces and integrated air and missile defense.
- Enhance military mobility and industrial coordination.
- Establish additional joint ISR fusion centers.
- Develop a pan-European logistics control network.
- Form multidomain operations (MDO) and cyber/influence task forces.

Together, these initiatives offer a blueprint for a more self-reliant, capable, and unified NATO in 2027—ready to meet emerging threats head-on.

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### INTRODUCTION

NATO's deterrence posture in the Baltic states is undermined by an overreliance on U.S. military capabilities. In a crisis where the United States were focused elsewhere, European NATO nations may therefore be unable to mobilize a timely, effective response. This overreliance creates both strategic and operational vulnerabilities that can be exploited by Russia to challenge the Alliance's credibility and threaten national sovereignty.

NATO's ability to deter or respond rapidly to Russian aggression is limited by:

- A lack of massed, ready combat forces in the theater
- Insufficient integrated air and missile defense
- Slow logistics and reinforcement timelines

- A lack of organic strategic mobility with a reliance on U.S. air and sealift
- A reliance on U.S. enablers for theater integrated C2, ISR, and mission networks

Without the United States, NATO remains superior in numbers and technology on paper but lacks the operational integration, logistics, and joint force capabilities to rapidly match Russian mass and tempo near its borders. NATO must develop a force structure and a mix of capabilities that allow for the execution of regional defense plans with an emphasis on burden sharing. This modernization strategy must be objective, threat-based, and resource-informed.

#### THE STRATEGIC CONTEXT

The next few years will be pivotal for Europe and the Euro-Atlantic community, as shifting U.S. geostrategic priorities toward the Indo-Pacific, persistent Russian threats, the rise of authoritarian powers, and a rapidly changing global order redefine the political landscape.

Alongside changing US and European Union (EU) defense priorities, the outcome of the war in Ukraine will be a critical factor in shaping NATO's strategies. As the devolution of the post-Cold War liberal international order accelerates, with increasingly fluid relations between states, a new geopolitical landscape looms over the horizon, shaped by the bounded orders that the principal great powers, the United States and China, are forming around them. To address the challenges facing the United States in key theaters, adaptability and robust multidomain capabilities will be paramount in ensuring both regional stability and the protection of democratic values. Nowhere is this more relevant than in the Euro-Atlantic theater, as resource requirements in the Indo-Pacific region will continue to divert US resources there, making technology a key multiplier for the US European Command (EUCOM) and NATO.

Russia's aggressive regional actions show no sign of slowing, with Moscow targeting Europe through both direct and indirect methods. As General Christopher Cavoli, EUCOM commander and the supreme allied commander Europe, recently testified before the US Senate, Russia has been and will likely remain a chronic threat to NATO. From military threats to hybrid warfare tactics—such as cyber-attacks, information campaigns, and economic pressure—Russia is further consolidating its influence in countries like Belarus, Moldova, Georgia, and Kazakhstan. As it rebuilds its military capabilities and doubles down on nuclear reliance, Russia is strengthening its ties with authoritarian regimes, creating an emerging "axis of dictatorships" alongside China, Iran, and North Korea.

The growing Russia-China partnership poses a unique challenge to NATO, particularly as China expands its influence globally and engages in economic warfare. That country also benefits from its de facto alliance with Russia by gaining access to some of Russia's modernized military technology, while China, in turn, provides a vital economic lifeline to Russia and a "moral legitimacy" for Russia's actions in Europe, which align with China's designs on Taiwan. This fusion of economic and military power, coupled with assertive moves in the South China Sea and Taiwan Strait, is reshaping global dynamics and testing NATO's reach and resilience. The West faces a

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rapidly evolving challenge, requiring swift, strategic responses to counter the growing authoritarian alliance that threatens global stability.

As Europe confronts an increasingly precarious security environment and potential friction in relations with the United States, the European Union appears to be doubling down on its efforts to achieve strategic autonomy. In March 2025, the EU unveiled a bold white paper outlining plans to significantly boost defense spending, foster collaborative defense projects, and shift toward purchasing European-made arms. This move is designed to close critical capability gaps in missile defense, drones, and cyber warfare, while also pooling resources to create a more unified defense infrastructure. The proposal even includes borrowing up to €150 billion for defense loans,

aiming to reduce fragmentation in Europe's defense industry and enhance the continent's self-reliance. At the same time, recent elections in Germany have introduced new dynamics into that country's defense policy. The newly elected leadership is reevaluating its defense priorities, a shift that could have significant implications for Germany's role within NATO and its contributions to collective defense. Friedrich Merz, the incoming chancellor, has successfully lobbied the Bundestag to lift the legal deficit spending restrictions on defense, while repeatedly underscoring that Europe must chart an independent course. How Germany navigates this shift will be crucial in shaping Europe's defense future and the tenor of transatlantic relations.

NATO, meanwhile, remains focused on deterrence and collective regional defense. With an emphasis on burden sharing and joint procurement of critical systems, the Alliance is rapidly expanding its combat-ready, forward-deployed forces in Poland and the Baltics, underpinned by a robust training and sustainment hub in Germany. The outcome of an ongoing US defense-posture review may drive additional modernization and deployment efforts, but this "fight tonight" readiness reflects NATO's shared vow to defend European borders and ensure security. As NATO defense ministers have pointed out, these efforts demonstrate Europe's increasing commitment to sharing the transatlantic defense load.

However, to truly succeed in its mission, NATO's efforts must be underpinned by a data-driven approach. Modernization planning for its MDO strategy must integrate cutting-edge data analytics to ensure that defense initiatives are not only effective but responsive to the emerging threats of today and tomorrow. This strategy must be backed by a comprehensive Alliancewide effort and a coordinated whole-of-government response to address NATO's most pressing security challenges with agility and precision.

Europe stands at a critical juncture. There is potential tension inherent in Europe's evolving commitment to strategic autonomy and strengthening NATO's collective defense, as both ultimately rest on the ability to generate relevant, usable integrated capabilities. This demands a warfighting mindset, and an understanding of the acquisition, integration, and training required to be successful.

As Europe grapples with the challenges of an increasingly unpredictable world, the key question for NATO and collective defense will be what capabilities Europe can contribute to offer credible options to NATO. Success will hinge on how swiftly and effectively these efforts are coordinated and implemented, as they will significantly shape political decisions in the years ahead.

#### The War in Ukraine

Russia's war on Ukraine has redrawn the European security map. It is a system-transforming conflict with asymmetric technology offsets, notably the emergence of drones and drone warfare. Regardless of the outcome, preexisting assumptions about transatlantic security and power distribution in Europe no longer hold. It is a litmus test for both NATO's unity and the EU's ability to sustain its support for Ukraine—especially as US military priorities shift toward Asia.

The coming months will be pivotal in determining how both institutions adapt to these pressures. NATO must reconcile the diverging priorities among its members, while the EU needs to strengthen its defense industrial base (DIB) to supply Ukraine, advance its own rearmament, and contribute to regional stability. As the crisis unfolds, the world will be watching how NATO and the EU respond—and whether they can navigate their internal divisions to confront the broader challenges ahead. Most of all, as the Trump

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administration endeavors to broker a ceasefire deal between Russia and Ukraine, the outcome of that process will likely be a defining factor in how the conflict unfolds in the coming months.

NATO's cohesion is being put to the test, as the Trump administration's pressure on allies to rearm generates a positive but uneven response. While some member states have stepped up defense spending, others remain hesitant, citing economic pressures and varying threat perceptions. The countries in the Baltic area and the Northeast Corridor have significantly increased their defense spending, while countries farther away from NATO's eastern frontier have been less forthcoming. This divergence risks weakening unity and effectiveness. NATO must address internal tensions to remain a credible force.

The EU's push to rearm is also being challenged. Economic strains, particularly in major European economies, threaten the EU's ability to sustain a unified defense approach. The EU's ambition to reduce dependency on the United States and bolster its defense capabilities is at risk unless it can harmonize the defense priorities of its member states. It also fails to address the most fundamental question of which country—absent a U.S. nuclear umbrella would provide a nuclear deterrent and in what fashion. This highlights the critical need for the EU to present a cohesive yet realistic program to address a dynamic regional and global security environment. While NATO remains the cornerstone of collective defense and deterrence in Europe, the EU can and must play a complementary role by strengthening defense industrial capacity, improving military mobility, and reinforcing political cohesion across the continent. The EU must use the financial and regulatory levers at its disposal to enable member states to meet their key capability requirements, as defined by NATO planning.

With the Ukraine conflict exposing vulnerabilities, NATO's reinforced presence in the Baltic area and

Poland has never been more essential. These regions are key to deterring further aggression and ensuring that European borders remain secure. At the same time, the war's impact on energy security and global supply chains has pushed Europe to rethink its transition to green energy. No longer willing to rely on Russian energy, European nations are diversifying their sources and debating the future of clean energy initiatives. Some EU members have mooted the idea of reopening the Nord Stream pipelines and at least partially normalizing economic relations with Russia once a ceasefire in Ukraine has been put in place. But Europe's challenges go beyond energy: NATO and the EU face the rise of hybrid warfare, autonomous systems and drone warfare, cyber threats, and false information campaigns—all of which undermine stability and test the Alliance's adaptability.

#### **Defense Spending: Trends and Projections**

As global security challenges intensify, both U.S. and European DIBs are grappling with serious capacity and scalability issues. The US DIB, now only 30 percent of its Cold War size, is strained by contractor consolidation and growing supply-chain vulnerabilities. Europe's defense sector remains fragmented, hampered by disconnected industrial policies that stifle cross-border collaboration and scalability, with lead times from orders to delivery still unacceptably long.

To maintain strategic readiness and counter growing threats, both the United States and Europe must urgently come up with bold solutions:

- Modular, scalable production facilities and additive manufacturing must be prioritized to rapidly adapt to shifting demands.
- A significant boost in munition manufacturing capacity is needed to sustain large-scale conflict operations.

- Cybersecurity enhancements across industrial and critical infrastructure networks are paramount to safeguard against emerging digital threats.
- The integration of artificial intelligence (AI), robotics, and autonomous systems will empower defense forces to deliver rapid effects with minimal manpower.
- Improved NATO coordination and interoperability are essential to ensure defense production is optimized, maximizing collective industrial capacity.

In President Donald Trump's second term, the United States faces a critical defense spending dilemma exacerbated by fiscal constraints, military recruitment challenges, and the demands of potential simultaneous conflicts in both the Atlantic and Pacific theaters. These factors present significant risks to NATO, transatlantic relations, and global security. To address these challenges. NATO must move from the perennial talk about burden sharing to burden shifting and focus on transferring conventional combat capabilities from the United States to Europe. This shift will require deeper military integration and force modernization to maintain NATO's effectiveness against growing threats from Russia and China. The United States must capitalize on its technological advantages while strengthening cooperation with European and Indo-Pacific allies. This approach will ensure the United States can balance its global commitments and continue to take the lead in maintaining international security. As a result, NATO's collective defense efforts will remain robust amid evolving geopolitical pressures. In a nutshell, technology must be a critical force multiplier for the Alliance, helping to offset at least some of Russia's advantage in mass.

Since its founding, NATO has depended on US leadership and military power. With the United States less able to provide the same level of conventional forces and infrastructure in Europe as it did during

the Cold War and the 2000s, key NATO members particularly Germany, France, and the United Kingdom—will have to significantly ramp up defense spending and military readiness. The key challenge will be to ensure that the EU doesn't veer into a full-blown "strategic autonomy" project, as that would inevitably drain real resources from NATO. Instead, efforts at deeper European defense industrial integration should allow Europe to take greater responsibility for its security by resourcing core conventional deterrence capabilities within NATO, while still benefiting from US strategic support. In this new landscape, NATO's collective defense would benefit, as regional defense plans would be backed by real, exercised capabilities—ensuring NATO is once again up to the task. Should the opposite happen—i.e., if Germany decides to push the EU to chart an independent course from the United Statesthe ensuing stresses in transatlantic relations would further fracture European politics and likely make the continent more vulnerable to Russian blackmail or allout aggression down the line.

European NATO nations have pledged to increase defense spending to 2 percent of gross domestic product, and many exceed that benchmark. Yet current European force posture in the Baltic states and elsewhere in the Northeast Corridor is insufficient to deter or respond to a rapid Russian incursion without significant external reinforcement. NATO needs to:

- Approach European rearmament in a way that builds credible, multidomain, combat-ready formations while keeping the United States engaged.
- Conduct a comprehensive review of capabilities and gaps (where the United States is engaged) to inform future force design and new operational concepts and doctrine to underpin collective defense.
- Develop a capability roadmap that enables burden sharing across the Alliance.

## THE VIEW WITHIN NATO: A 2027 OPERATIONAL PERSPECTIVE

In response to Russia's expanding capabilities, NATO has embraced a deterrence-by-denial posture, focusing on MDO to counteract aggression. This includes deploying forward forces, pre-positioning critical equipment, and developing operational concepts that prioritize holding the line and achieving rapid victory. Success will depend on massed effects and orchestrated battlefield efforts, with the unique strengths of each NATO member synchronized to support one another.

To counter emerging threats, NATO must urgently strengthen its logistical networks and mobility, ensuring rapid reinforcement of its eastern borders. Investment in key north-south road and rail corridors to enhance mobility along the eastern flank—from Scandinavia to the Baltic and Black seas—is essential for seamless troop and resource movement. Equally critical are interoperable C2 systems, designed with a data-centric, on-demand capability approach. These systems must integrate multidomain forces across nations, services, and echelons to maintain cohesion and operational effectiveness. To meet these challenges, NATO must modernize its infrastructure and adopt a wartime mindset, focusing on resilience, readiness, and strategic investments in critical capabilities. The Alliance must establish the necessary authorities to institutionally act with specific member states working in tandem with the EU to invest in critical infrastructure upgrades that support NATO operational requirements

Russia's military modernization efforts include enhancing unmanned systems for ISR and attack operations, networked fires, advanced weapons like hypersonic missiles, and robust cyber capabilities. Coupled with hybrid tactics such as false information campaigns, cyber-attacks, and sabotage, Russia poses an increasingly complex threat—especially with its use of "gray zone" strategies designed to blur the

lines between conventional and irregular warfare. To counter these threats, NATO must be able to rapidly mobilize and deploy forces, emphasizing massed effects and MDO to blunt Russia's initial momentum. The first seventy-two hours are critical, as Russia would aim to quickly seize territory and key infrastructure. Denying Russia these early operational gains could provide a critical off-ramp to avoid a protracted conflict. The following operational needs are key to NATO's success:

- Track and target key Russian units by using advanced C2 and ISR capabilities, holding them at risk before conflict escalates.
- NATO MUST
  MODERNIZE ITS
  INFRASTRUCTURE
  AND ADOPT
  A WARTIME
  MINDSET,
  FOCUSING ON
  RESILIENCE,
  READINESS,
  AND STRATEGIC
  INVESTMENTS
  IN CRITICAL
  CAPABILITIES.
- Surge reinforcements to hot spots through enhanced rapid deployment mechanisms as tensions rise.
- Deploy highly lethal forces, supported by unmanned systems, to halt Russian advances at the point of contact, using well-coordinated defensive positions and preplaced forces.
- Counterattack through multidomain orchestration and converged effects, targeting Russian C2 and employing anti-armor and long-range precision fires systems to disrupt rapid advances.
- Build integrated, trained formations capable of maneuvering and attacking Russian forces, logistics, and C2 systems to reclaim territory and reestablish international boundaries.

NATO must continue to strengthen its forward combat-ready presence with balanced rotational and permanently stationed forces, while investing in fires and defensive capabilities that provide a reinforcement window from the United States and other NATO nations. Critical to ensuring deterrence by denial is the top-down commitment from member states to operationalize multidomain C2, NATO's unified networking and digital infrastructure.

#### **Building an Effective NATO Force Design**

The Alliance must ensure that procured systems are the right systems based on regional plans, capability targets, and desired mission effects and work together seamlessly to create an integrated and interoperable multidomain force. To that end, NATO must:

- Deploy multinational MDO groups with shared ISR, C2, and kinetic/nonkinetic fires to overwhelm Russian forces and halt their advance.
- Expand integrated air and missile defense systems to counter advanced threats, including drones.
- Enhance rapid deployment and mobility through improved multimodal transport corridors and strategic airlift capabilities.
- Implement layered force protection and countermobility measures along NATO's borders, buying time for multidomain forces to strike Russian formations deep inside their territory.
- Pre-position critical supplies (ammunition, fuel, heavy equipment) along the eastern flank.
- Invest in pooled and shared resources across member states, particularly in high-tech areas like satellite communications, drones, Al, and surveillance platforms.
- Invest in integrated training and experimentation to create strategic deterrence.

#### Establishing a NATO Multidomain Operations Strategy

NATO's ability to conduct effective MDO has never been more crucial. To counter Russia's expanding military capabilities, NATO must integrate and leverage all domains—land, air, sea, cyber, and space—into a unified, cohesive strategy. MDO allow NATO to rapidly respond, disrupt enemy operations, and maintain strategic advantage. By improving interoperability, developing common standards, and building a seamless digital ecosystem, NATO can enhance its operational effectiveness and ensure rapid, coordinated action across all member nations. To counter Russia's aggression and to reinforce its role as the cornerstone of global security, NATO must put forward an MDO strategy focused on a range of critical capabilities:

- A next-generation multidomain C2 system: This system must integrate all operational domains land, sea, air, space, and cyber—into a single, unified interface for commanders. It should be fully interoperable across NATO member states and their national C2 architectures, enabling seamless crossdomain integration and battlefield orchestration, regardless of time, geography, or mission requirements.
- Integrated multidomain C2 operations centers: Within NATO's multinational divisions, corps, and joint force commands, these centers can help to integrate situational awareness of national forces. Progress must continue to enable them to be networked to orchestrate operations across all domains, ensuring quick, coordinated action.
- Integrated ISR fusion centers: These centers must break down information-sharing barriers and integrate intelligence from multiple domains to provide real-time, actionable insights that are essential for swift decision making that enables expanded maneuver and cross-domain fires.

- Al (algorithmic warfare): Al will be pivotal in predictive analytics, persistent targeting, effects planning, and operational decision support. These algorithms can enhance decision making by providing commanders with insights on potential outcomes and courses of action.
- Cyber-resilient digital architectures: The zerotrust model secures critical systems and data by minimizing attack surfaces, enforcing leastprivilege access, and enabling resilient, segmented networks. NATO's digital infrastructure must employ this cybersecurity model to be protected from adversarial attacks that could disrupt or manipulate critical data, Al algorithms, and operational capabilities, ensuring system integrity and operational continuity.
- Autonomous systems: Leveraging low cost, expendable systems for reconnaissance, targeting, maneuver, lethal and nonlethal fires, and logistical support will significantly increase operational efficiency and reduce risks to personnel in

- contested environments.
- Unified networking and digital infrastructure: A datacentric approach will enable plug-and-play software development tailored to mission needs, ensuring NATO's digital systems remain agile and responsive to emerging threats.

NATO must prioritize systems thinking, integration, and data interoperability within a unified, multidomain digital architecture. This approach is vital to ensuring that collective defense and deterrence capabilities are effective and adaptable to the complexities of modern warfare. These measures can significantly enhance NATO's deterrence posture by leveraging technology to achieve mass and counter emerging threats. Success hinges on developing common standards, fostering interoperability across national systems, and creating a robust digital ecosystem that facilitates seamless data flow and decision making.

### **ENVISIONING NATO'S FUTURE THROUGH MISSION ENGINEERING**

The United States and NATO must make smarter, faster decisions about what capabilities to acquire and how to integrate them within an multidomain force design. Every acquisition and force-development decision should be driven by a clear understanding of why it's needed, when it's needed, where it will be deployed, and what mission outcomes are expected. Only by focusing on these key factors can NATO build the warfighting capability and capacity needed for future success within the urgent timelines required.

NATO force modernization is not just about increasing defense spending—it is about spending smarter and optimizing the resources in hand more effectively. Regardless of spending levels, NATO must shift from a national-centric approach to an Alliance-wide mindset. This requires a shared engineering and analytics methodology to optimize defense resource allocations with a focus on speed, precision, and collaboration.

By investing in forward-deployed forces, integrated air and missile defense, multidomain warfare enabled by integrated C2 and ISR, autonomous systems, and resilient logistics, European NATO nations can strengthen deterrence and response capabilities—without relying on immediate U.S. military intervention.

NATO, especially NATO European nations, must rapidly transform warfighting concepts and capabilities to counter a resurgent Russian threat by 2027. This demands agile decision making and investment in technological innovation, seamless integration, and interoperability—all essential to generate combat mass and achieve dominance in multidomain warfare.

MITRE's data-driven, systems-thinking approach coupled with the Atlantic Council's Euro-Atlantic strategic knowledge revolutionizes multidomain force design by combining scenario-based mission engineering and operational analysis. Known as the NATO Force Mix Analysis, this powerful methodology

assesses and optimizes military force structures, C2, ISR, and fires architectures, all aligned with strategic capability options in a threat-driven context to help inform coordinated, future-ready investment strategies across the Alliance.

If broadly adopted, the NFMA can help NATO— especially European members—accelerate capability development, respond more effectively to current and emerging threats, and validate new technologies through continuous, real-world analysis and experimentation. This, in turn, would enable faster deployment of critical systems and smarter operational decisions. Specifically, the NFMA could support NATO in the following ways:

- Inform early deployment of experimental platforms and operational concepts. Prototypes will be evaluated in both live exercises and fielded operational environments to test performance, uncover capability gaps, and refine tactics. This would enable NATO to assess the real-world effectiveness of emerging technologies and operational concepts before full-scale integration.
- Provide the foundation for continuous testing and evaluation of tactics, techniques, and procedures in varied operational scenarios. Through persistent experimentation, NATO will remain adaptable, learning and evolving in response to new threats and opportunities for innovation.
- Enable rapid development and procurement of new capabilities to ensure NATO can meet evolving defense needs. Employing open architectures and agile acquisition for fielding critical capabilities will reduce time to implementation and enhance operational flexibility.
- Help NATO collectively identify and field the right combination of force structures, technologies, and operational strategies to strengthen its deterrence

posture while maintaining agility and readiness. Through mission engineering, operational prototyping, persistent experimentation, and agile acquisition, NATO can test new capabilities and refine operational strategies to ensure sustained deterrence and rapid response in the Baltic region.

The Alliance must assess and adapt its force mix to operate in a contested, multidomain environment. The following analytic questions are critical to guiding NATO's posture, readiness, and resilience amid evolving threats and uncertain U.S. force commitments.

- How can NATO combat readiness and forward presence be improved?
- How can NATO establish a resilient, multidomain
   C2 and ISR architecture and how does NATO

best offset a reduction in U.S. commitment of its capability and capacity?

- How resilient is European C3 and ISR under cyber and kinetic attack?
- What data integration and decision processes enable NATO unity and speed?
- How can NATO improve persistent targeting and lethality?
  - How can NATO establish a joint fires network?
  - What is the role of Al and autonomous systems in targeting and lethality?
- What is required for integrated air and missile defense (including counter-unmanned aircraft systems) to hold the line?

#### **Mission Engineering Approach for Decision Making**

#### **Mission Architecture** Baseline - Existing Resources to Fight Tonight **Mission Context** Alternatives - Technology to Generate Intelligent Mass Scenarios/Vignettes Regional Defense Plan Mission Architectures Adversarial Threats Baseline MTs and METs Results & Recommendations Mission Problem (or Opportunity) Mission Characterization Alternative MTs and METs Defense **Smarter &** Challenge **Faster Strategic** Identify Mission & ME Purpose Mission Context Questions Mission Impacts & Outcomes **Decisions** Mission Engineering Analysis Investigative Questions Gaps Mission Metrics Force Mix & Concepts Deterrence Posture Design Analysis Agile Acquisition Integration & **Mission Metrics** Interoperability Define Mission Effects Required for Operational Operational Analysis Success Model & Simulate Mission Architectures Align to Capability Targets Assess impact on achieving mission effects

#### THE NATO 2027 USE CASE: INSIGHTS AND PRIORITIES

Initial insights from the NFMA underscore several operational priorities critical to NATO Europe's ability to independently deter or defeat a Russian offensive in the Baltic region by 2027, particularly in scenarios with limited or delayed U.S. engagement. These insights highlight the importance of integrating advanced fires, mobility, survivability, and C2 capabilities into a cohesive, MDO concept.

Key findings and operational priorities include:

- Countering Russian mass and tempo with integrated fires: NATO must pair long-range precision fires with close-combat drone swarms to disrupt and degrade Russian force concentration and tempo. This layered approach enhances survivability while enabling rapid effects across the depth of the battlespace.
- Persistent targeting via multidomain fires and C2 networks: Success in a high-threat environment requires a persistent, integrated "kill chain" linking ISR, C2, and fires across all domains. NATO must be capable of delivering operational-level fires from standoff range to neutralize Russian anti-access/ area-denial systems, command nodes, and massed maneuver forces within key mobility corridors.
- Overmatch in mobility, countermobility, and

- **survivability:** NATO forces must dominate the terrain through superior mobility and countermobility operations, creating choke points and engagement zones that slow Russian advances and funnel them into preplanned kill boxes. Critical targeting priorities include Russian combat engineering units that enable cross-country movement and breaching operations, in addition to traditional C2 and logistics nodes.
- Integrated, layered force protection and terrain shaping: A combination of physical border fortifications, camouflaged forward positions, and active defense systems is required to delay Russian momentum and generate tactical opportunities creating conditions for NATO forces to strike with precision anti-armor fires, loitering munitions, and coordinated drone swarms, especially at choke points and terrain seams.

These insights reinforce the need for NATO to invest in operational prototyping, joint experimentation, and rapid fielding of advanced fires and survivability capabilities. Implementing these priorities through a data-driven, mission-engineering approach will ensure NATO Europe is postured for success in a contested, near-peer conflict environment.

#### RECOMMENDATIONS

Building on the operational insights from the NFMA, the following recommendations are aimed at enabling NATO Europe to independently deter, respond to, and potentially defeat Russian aggression in the Baltic states by 2027. These measures are designed to accelerate capability development, institutional reforms, and operational integration in line with a forward-leaning, data-informed, mission-engineering framework.

- Prepare a warfighting burden-sharing roadmap: NATO must develop a capability roadmap that enables burden sharing and, where appropriate, burden transfer from the United States to Europe for critical warfighting capabilities while addressing gaps to achieve threat overmatch.
- Establish a unified NATO multidomain warfare doctrine: Develop and implement a multidomain operational concept, aligning land, air, maritime, cyber, and space operations across regional defense plans and force structures.
- Invest in multidomain C2 and ISR infrastructure:
   Build a resilient, interoperable digital architecture to support real-time C2, dynamic targeting, and cross-domain ISR sharing among allies.
- Establish a NATO multidomain open system architecture: Create an open system test and experimentation architecture to drive C2 interoperability and rapid deployment based on mission and user need.
- Accelerate forward posture of heavy forces and IAMD: Pre-position armored units and layered air and missile defenses in key forward areas to enable rapid combat mass and early crisis response.
- Enhance military mobility and industrial

- **coordination:** Improve cross-border military transit and align defense industrial base efforts for surge production of critical systems and munitions.
- Establish additional joint ISR fusion centers:
   Set up additional ISR hubs in Germany, Poland, and Finland that build on existing Baltic centers to provide persistent battlespace awareness and theater-level targeting.
- Develop a pan-European logistics control network:
   Create a secure, integrated logistics system to sustain operations under contested conditions, incorporating civilian and military infrastructure.
- Form MDO and cyber/influence task forces: Deploy specialized units to coordinate cross-domain fires and information operations, supported by integration cells at corps and division levels.
- Conduct no-notice Article 5 rehearsal war games (without U.S. surge forces): Routinely execute unscripted, short-notice multinational exercises to test NATO's ability to respond to aggression under Article 5. Use outcomes to inform force posture and capability investments.
- Build a NATO integrated training and validation program: The joint training architecture, in coordination with Supreme Headquarters Allied Powers Europe, will validate unit readiness and interoperability in line with the 2027 vision. This program should emphasize realistic, threat-informed scenarios and integration of new technologies and concepts.

### **CONCLUSION**

To maintain NATO's deterrence credibility and defend national sovereignty in the face of a reconstituted Russian threat, Europe must assume greater responsibility and operational capability. Achieving this NATO Europe 2027 vision requires more than policy alignment—it demands a mission-driven, technically grounded approach to force design, readiness, and modernization. In support of operationalizing this vision, the MITRE–Atlantic Council collaboration on the NATO Force Mix Analysis offers a reusable, scalable technical framework to guide strategic defense decisions through 2027 and beyond.

This framework integrates advanced digital engineering tools, mission-level modeling, and decision analytics to continuously evaluate NATO's defense needs, mission requirements, and acquisition priorities in a dynamic threat environment. It provides a rigorous, evidence-based foundation for aligning strategy with capability development—supporting faster, smarter, and more resilient force planning across European allies.

Key enablers of the NATO 2027 vision include:

 Mission-driven analysis: NFMA supports an ongoing assessment of force mix options aligned with strategic objectives, enabling nations to prioritize investments that close capability gaps and build operational mass.

- Digital engineering and modeling: High-fidelity simulation and modeling environments allow planners to visualize and evaluate operational concepts, logistics, and reinforcement timelines under contested conditions—before investments are made.
- Operational prototyping and experimentation: The NFMA approach enables early testing of new operational concepts and technologies through simulation, live exercises, and real-world experimentation—de-risking decisions and informing doctrine.
- Agile acquisition support: Insights from the NFMA can guide iterative acquisition decisions, accelerating the deployment of high-impact capabilities such as ISR, integrated air defense, mobility assets, and interoperable C2 systems.

By institutionalizing this framework across NATO stakeholders, the Alliance can move beyond static planning cycles and toward a dynamic, data-informed approach to force design and strategic posture. This is essential for fielding a lethal, agile, and independent NATO Europe—capable of deterring and, if necessary, defeating threats in the Baltic region and beyond, even in the absence of immediate U.S. intervention.

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