



NATO ALLIED FORESIGHT CONFERENCE

2025
Report







“Our adversaries and competitors act boldly. They seize the initiative, they innovate, they experiment — and too often, they try to force us into a reactive position.

We cannot afford to remain reactive. To preserve our credibility, our deterrence, and our readiness, we must not only see the future coming, we must be prepared to shape it.”

General Aurelio Colagrande
Deputy Supreme Allied Commander Transformation

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INTRODUCTION



As the Eternal City celebrated both the Catholic Jubilee and the election of a new Pope, representatives from both NATO and partner nations gathered at the NATO Defense College (NDC) from

07-09 October 2025 for the 2025 Allied Foresight Conference.

Co-hosted by Allied Command Transformation (ACT) and the NDC, with the generous support of the Italian Republic, the Allied Foresight Conference brought together military and political leaders, academics, futurists, capability developers and representatives from partner nations to discuss the emerging security environment and how NATO should adapt to meet the challenges of

the future. The theme of this year's conference, "Tomorrow Starts Today," succinctly captured the spirit of these critical discussions.

This year's conference challenged prevailing assumptions within the Alliance by incorporating global perspectives, the roles of adversaries, and underexplored but possible futures. Breakout discussions revolved around foresight capabilities and implications, examination of existing policy gaps, and important strategic takeaways for NATO's future defence planning.

Over 220 conference participants from Allied and Partner nations provided valuable perspectives and experience to help the Alliance adjust its security posture to address future threats and challenges. Their contributions, debates, and discussions resulted in a productive and successful conference that provided NATO's military and political leadership with well-researched proposals and considerations to drive NATO's military adaptation through the mid-21st century.



On the morning of 8 October, General Aurelio Colagrande, Deputy Supreme Allied Commander Transformation (DSACT) and Lieutenant General Max Nielsen, Commandant of the NATO Defense College, jointly inaugurated the start of the 2025 Allied Foresight Conference (AFC).

General Colagrande discussed the critical nature of foresight to the Alliance and stressed that NATO must be the one to shape the future against its adversaries. He highlighted ACT's two flagship foresight products: the Strategic Foresight Analysis and the Future Operating Environment. Lieutenant General Nielsen expressed similar sentiments, stating that we are not just preparing for any future, but an Allied future. He highlighted past examples of success and failure in strategic foresight and offered three key considerations for predicting the next chapter of warfare: the timeline of new technology, the impact of human adaptability, and that the most transformative changes often come from unexpected sources.

The 2025 AFC Conference had three focus areas:

- Highlight ACT's key deliverables related to strategic foresight and the future force design of the Alliance.
- Challenge prevailing assumptions by incorporating alternative global perspectives, adversarial futures, and underexplored weak signals.
- Capture the "What's Next?" and "So What?" lessons that NATO should implement to better secure the future.

Strategic foresight is an inherently difficult task. It is almost impossible to predict what the operating environment will look like even five years from now. However, by bringing together NATO leaders and futuristic thinkers, along with academics and industry experts, the AFC helped to raise awareness of numerous possible futures and the need to start shaping the future today.

The war in Ukraine has demonstrated the rapidly changing nature of the contemporary operating environment and the need to prepare now for future conflicts. The rapid proliferation of Unmanned Aircraft Systems (UAS) and Counter-UAS (C-UAS) warfare, the need for timely intelligence, and the importance of reconstitution on the battlefield are just a few of the examples of the evolving character of 21st century warfare. The AFC addressed these concerns through a



unique variety of topics, such as the importance of adaptable wargaming, science fiction as inspiration for future thinking, red-teaming, and the role of reserves in future warfare.

The Conference encouraged open and honest discussions, ensuring the attendees challenged current approaches to thinking about the future. It stressed that NATO must be a learning organization, willing to evolve and adapt to unforeseen challenges. Finally, as hope is not a strategy the event highlighted the need for commitment from all allies as NATO prepares to address future challenges and opportunities.



OPENING REMARKS

Speakers



- Lieutenant General Max Nielsen, Commandant, NATO Defense College (DNK)



- General Aurelio Colagrande, NATO Deputy Supreme Allied Commander Transformation (ITA)

Key Points

- The purpose of foresight is not to predict the future, but to understand its possibilities, explore alternative paths, anticipate risks, and seize opportunities.
- Foresight is stronger when it is collective. NATO relies on its allies and partners to help solve future military, geopolitical, societal, and technological challenges.
- We must remain humble and adaptable.
- NATO must consider the impacts of new technology, human adaptability, and the strategic effect of transformative changes from unexpected sources.

KEYNOTE –

STRATEGIC PLANNING, THINKING, AND FUTURING

Speakers

- Anders Inset, Philosopher and Futurist

Key Points

- NATO's mission is to prepare for a “war against wars”—to deter conflict by making it irrational and unwinnable.
- Foresight leadership carries responsibility: to ensure technology drives human progress, not destruction.
- “Future” should be seen as a verb—an active process of shaping what lies ahead. NATO must help its members learn how to “future.”
- Today, Russia's use of drones and autonomous systems highlights the accelerating race in technology and economic power.
- Ukraine's forward-looking discussions on its post-war economy exemplify strategic foresight and resilience.



KEYNOTE –

THE NEXT (RULES-BASED?)

INTERNATIONAL ORDER – A MAJOR DRIVER OF CHANGE

Speakers

- Dr. Joseph Voros, Futurist (AUS)

Key Points

- The Three Horizons Framework: This approach structures thinking about change across three overlapping time horizons. The first horizon focuses on the present system—its dominant models, current capabilities, and established ways of operating. The second horizon captures emerging trends, innovations, and disruptions that challenge the status quo and signal potential transitions. The third horizon looks further ahead to the future system—often difficult to perceive—shaped by competing visions, transformative ideas, and paradigm shifts that may ultimately redefine the strategic environment.
- We are in the second horizon, the transition zone to horizon three, which is often turbulent.
- We are not in a second Cold War, but a Grey War due to the amount of grey zone activity being conducted by our adversaries.
- The world is slowly moving away from a rules-based axis towards balance of great powers.
- The Rules-Based International Order can be revived but will require more leadership from Europe.



READ AHEAD –

PANEL 1: SAME WORLD / DIFFERENT FUTURES – GLOBAL PERSPECTIVES ON UNCERTAINTY

As NATO commits to higher levels of defence spending and seeks to ensure that planning and force design are future-ready, the Alliance must recognize that it is not evolving in isolation. The same world may be viewed very differently outside NATO's traditional area of responsibility and focus. Strategic foresight gains depth and resilience when informed by perspectives from other regions, sectors, and communities of thought—perspectives that highlight uncertainties, risks, and opportunities that may not be visible within NATO's established frameworks.

This senior level panel convened distinguished experts from industry, academia, and the military who represent regions and perspectives beyond NATO's immediate circle. In a moderated discussion, they explored how the future might unfold along diverging pathways, shaped by shifting power dynamics, disruptive technologies, climate and demographic change and global economic transformations.

The discussion explored alternative trajectories and challenge prevailing assumptions, encouraging NATO leaders to broaden their understanding of what lies ahead. By exposing the Alliance to a spectrum of plausible futures, this session aimed to sharpen strategic awareness, identify potential blind spots, and expand the range of options for defence planning and force development.

Preparatory Thoughts & Questions for Discussion

- Which global uncertainties outside NATO's immediate focus could most significantly shape the future operating environment?
- How might alternative regional perspectives challenge or complement NATO's own assumptions about the future?
- In what ways could societal and economic transformations, from demographics to resource pressures, reshape global security dynamics?

PANEL DISCUSSION – SAME WORLD / DIFFERENT FUTURES – GLOBAL PERSPECTIVES ON UNCERTAINTY

Moderator

- Dr. Florence Gaub, Director of the Research Division at the NATO Defense College in Rome (DEU/FRA)

The first panel of the conference introduced experts from NATO and Partner nations to look at the issue of strategic foresight from a global perspective. It helped to remind attendees at the AFC of the necessity of looking beyond NATO's borders when considering what factors will shape the future strategic environment.

The panel opened with some general reflections on the future, noting that there is no single future; multiple visions coexist, shaped by diverse perspectives and contexts. Each panelist provided unique perspectives on the future of the global strategic environment that NATO should consider in its own strategic foresight efforts.

Panelists

- Ms. Dayle Stanley, Director, Department of Defence (AUS)
- Ms. Geraldine Wessing, Shell, Chief Political Advisor (NLD)
- Colonel Wenxian Hong, Director, Strategic Futures, Ministry of Defence (SGP)
- Dr. John Sweeney, UNESCO Chair, Futurist (USA)



The panel addressed both global and regional challenges facing NATO and its partners. They discussed the impacts of climate change, migration and shifting demographics around the world. Panelists also brought attention to the importance of energy and resource competition and its impacts on future strategic planning efforts. Additionally, the panel recognized the increasing political and social divisions across many nations and how social stability is another factor that must be incorporated into strategic foresight.

Adversaries and great power competition featured prominently in the panel discussion. Panelists discussed the growing influence of China in the Pacific, its ongoing competition with the U.S. and how China is positioning itself strategically in the energy transition, holding essential resources for green technologies. They discussed the importance of “middle powers” in Europe and Asia exercising greater regional autonomy as many of them must balance their relationships between the U.S. and China. This balancing is increasingly salient as NATO and its partners monitor how the U.S. evolves internally and externally in the coming decade. This previous point was identified as a critical blind spot in strategic foresight. Finally, panelists discussed Russian strategic foresight, noting how Russia is diversifying its economy to account for the waning dominance of oil and how this will impact its future role in the global community.

Panelists provided considerations for future foresight efforts. Societies and institutions must be willing to learn, reflect, and adapt to changing circumstances. Planners must rethink assumptions based on new evidence and observable trends. They must also be willing to think unconventionally and account for many possible scenarios, no matter how improbable. In addition, nations must consider the technological resilience of everything from data infrastructure to undersea cables. The panel also argued that nations around the world should move beyond binary thinking and recognize that competition and cooperation will coexist. This is especially true if the global role of the U.S. changes in the coming decades.

Highlights from the Question-and-Answer Segment

- **Foresight should not be judged by prediction accuracy but by its ability to shape thinking and decision-making.**
- **Shaping the future requires both internal and external reflection—understanding why and how organizations wish to influence change.**
- **Leadership must create time and structures for long-term thinking, supported by cross-government networks and shared insight platforms.**
- **Effective communication of foresight conclusions is as critical as the content itself—tailoring messages to audiences ensures practical impact.**

KEYNOTE –

RETHINKING WAR, RISK, AND THE PREPOSTEROUS FUTURES

Speakers

- Dr. Gabriele Rizzo,
Foresight Executive (ITA)

Key Points

- The next major conflicts may not resemble the wars we know. Victory could shift from battlefield dominance to control of **supply chains and infrastructure**.
- Organisations are optimized for yesterday's wars and today's certainties; the real danger is not ignorance but **certainty**—an overreliance on known risks and established assumptions.
- Traditional military planning manages **risk** (known unknowns, quantifiable probabilities). Today's environment is better characterized by **deep uncertainty** and “unknown unknowns,” which demand imagination and rehearsal, not just calculation.
- Systems tend to reject the preposterous and unfamiliar; in an era of accelerating change this is dangerous. Rehearsing the implausible reduces surprise and increases adaptability.
- We miss unthought futures because we base planning on past success, expect gradual change but face sudden shifts, plan narrowly while shocks emerge from markets/media/society, and avoid naming taboo but plausible scenarios.
- We must use foresight proactively—“**under fire**”—before adversaries do. We should treat the “preposterous” as plausible, time-dependent, and worthy of rehearsal.
- Teams that cannot entertain preposterous scenarios remain trapped in their comfort zone; adaptability to the unknown will determine success in future conflict.
- Three illustrative, not predictive, preposterous futures could be:
 - **Energy abundance and resource wars:** If nuclear fusion or other breakthrough energy sources become commercially viable soon, energy geopolitics could invert: petrostates lose dominance, new planetary-scale conflicts (e.g., over climate control) emerge.
 - **Space-based manufacturing:** Automated manufacturing and mining in space could decouple industrial power from Earth, shifting the basis of strategic advantage away from terrestrial economies.
 - **Programmable, living infrastructure:** Advances in synthetic biology and programmable materials could make infrastructure adaptive, camouflaging, or weaponizable—undermining doctrines built on territorial control.
- Takeaway: Preparing for future conflict requires rehearsing the unthought and embracing intellectual discomfort. Those who adapt faster to the unknown and cultivate imaginative foresight will hold the decisive advantage.



READ AHEAD –

PANEL 2: ADVERSARIES' AGENDAS – HOW RUSSIA AND THE PEOPLE'S REPUBLIC OF CHINA SEE THE FUTURE OPERATING ENVIRONMENT

To achieve a holistic approach to strategic foresight and futures thinking, it is critical to understand not only NATO's own trajectory but also how potential adversaries perceive the future. This panel brings together senior analysts to examine how Russia and China envision the Future Operating Environment (FOE), shedding light on their strategic narratives, priorities and long-term objectives. By exploring how these actors anticipate global power shifts, technological developments and evolving conflict domains, the session will provide NATO leaders with insight into potential challenges and opportunities arising from competing strategic ambitions.

Serving as a complement to the preceding panel Same World / Different Futures, which examined alternative global perspectives, this expert dialogue completed the broader picture of the complex security landscape. Participants gained a clearer understanding of adversaries' mindsets and ambitions, enabling better-informed decisions for defence planning, force design and anticipatory strategy.

Preparatory Thoughts & Questions for Discussion

- **How do Russia and China conceptualize the future global security environment and what assumptions underpin their strategic planning?**
- **Which technological, political, and economic trends are prioritized by these actors and how might they shape their military development?**
- **Which aspects of Russia's or China's FOE assumptions are most underestimated or misunderstood by NATO?**

PANEL 2–

ADVERSARIES' AGENDAS – HOW RUSSIA AND THE PEOPLE'S REPUBLIC OF CHINA SEE THE FUTURE OPERATING ENVIRONMENT

Moderator

- Dr. Regina Karp, Old Dominion University (DEU)

Panelists

- Dr. Andrew Monaghan, NATO Defense College and Royal United Services Institute (GRB)
- Ms. Francesca Buratti, Allied Command Transformation (ITA)
- Dr. Oriana Mastro, Stanford University (USA)

The aim of the second panel was to discuss how Russia and China are posturing now to control tomorrow's strategic environment. They structured the discussion around the following:

- **Chinese and Russian visions of their respective roles in a new global order.**
- **Possible realignment of alliances and centers of power.**
- **The role of the U.S. and NATO.**



The panel began by framing the discussion around several important observations. They observed that power, both material and non-material (identity, ideology, and perception), remains central to statecraft. Panelists also agreed that for a proper understanding of the strategic outlook of the Chinese and Russian governments, Western nations must analyze those governments' self-perceptions and narratives and not just how the West views them.

Panelists then moved on to discuss Russia's strategic outlook, or "Vision 2030." They argued Moscow envisions a "post-West world" dominated by three pivotal powers – the U.S., Russia, and China – alongside a few rising regional actors. This concept is rooted in mobilization for long-term geopolitical competition which emphasizes access to resources, transit corridors, and markets. In this scenario, Russia anticipates a multi-polar world order and is preparing to face a myriad of



issues, including challenges from the U.S. and its allies over Arctic routes and Baltic access. There is also concern that U.S.-Chinese tensions in the Pacific could threaten Russian maritime routes. To address this potential geostrategic problem, Moscow is already expanding its defence planning for greater activity in the Pacific, seeing it as a future arena of strategic contestation.

The discussion then turned to China's strategic vision and long-term ambitions. The panel noted that while NATO's 2022 Strategic Concept defines China as a "challenge" and not a threat, China's own outlook is far more ambitious. Xi Jinping's speeches frame a Sino-centric world seeking "harmony and balance" — in contrast to what Beijing portrays as a U.S.-dominated, Cold War-mentality system. For Xi, the panel argued, achieving this balance requires diluting Western alliances, including NATO, seen as U.S. tools that could expand to the Indo-Pacific. Militarily, China's doctrine identifies space, cyber, and information as the ultimate frontiers of warfare. The long-term goal is a highly technological battlespace where China prevails. By 2049, the centenary of the People's Republic, China aims to become the world's leading military power, controlling key global chokepoints such as the Strait of Malacca, the Strait of Hormuz, and Arctic Sea routes as a self-declared "near-Arctic nation."

Finally, the panel turned to the role of the U.S. and Western Strategic Dilemmas. They discussed how China's rise has redefined global power competition, with the U.S. now actively preparing for a potential Taiwan conflict, reflecting a major strategic shift. They argued

the future center of gravity lies in Asia, not Europe, and Europe and NATO must decide how to remain strategically relevant in this environment. European dependence on China for trade and investment complicates strategic messaging and NATO's unity on China remains limited. Some panelists argued that, should conflict erupt in the Pacific, Europe's leverage is economic, not military; credible deterrence requires demonstrating readiness to risk economic consequences to impose real costs on Beijing. Concerning the China-Russia relationship, the panel stressed it is not an alliance, but a mutual non-aggression and strategic convenience partnership aimed at competing with the U.S. Both support one another through dual-use trade, technology cooperation, and joint political messaging, while avoiding formal defence commitments. China's support for Russia's war in Ukraine—though indirect—reveals the depth of their pragmatic alignment, which has been evolving since the early 2000s.

The panel closed with some analytical observations on Russia and China. They claimed Russia seeks strategic endurance and geographic access while China seeks global pre-eminence and systemic redesign. Both share an ambition to reshape the international order away from U.S. dominance, though each uses different instruments (Russia uses disruption while China uses integration and influence). Some panelists speculated that the Indo-Pacific will define the next 50 years of global power relations but also noted that the West's greatest vulnerability is conceptual: misunderstanding how its adversaries imagine the future.

READ AHEAD –

BREAK-OUT SESSION 1 – TOWARDS A LONG-TERM THEORY OF ADVANTAGE

NATO's strategic posture has traditionally been defined by short to medium-term adaptation to shifting threats, often reacting to adversaries' moves rather than shaping the competitive environment. In an era of persistent systemic rivalry, technological disruption and rapidly evolving domains of conflict, this reactive stance risks eroding the Alliance's edge. What is needed is a long-term theory of advantage, a coherent framework that articulates how NATO can deliberately create and sustain strategic, operational and political superiority over decades. Such a theory might push the Alliance to make hard choices about where to invest, which dependencies to break, which norms to defend, and which to rewrite. Without it, NATO may continue to "do more" without ever deciding what it is ultimately trying to win.

This session examined how NATO can move beyond short-term adaptation to develop a long-term theory of advantage — a framework for shaping choices, guiding investments and sustaining superiority in a changing security environment.

SESSION AIM:

**Discuss the utility of a
Long-Term Theory of
Advantage in supporting
Alliance Deterrence and
Defense Efforts**

BREAK-OUT SESSION 1 – TOWARD A LONG-TERM THEORY OF ADVANTAGE

Facilitators

- Dr. Olivier Schmitt (University USD, BEL)
- Dr. Tim Sweijs, HCSS (NLD)



Here are 5 key points summarizing the ideas and discussion for utilizing theories of advantage to support Alliance deterrence and defence efforts:

- 1. Theories of Victory vs. Theories of Security:** A theory of victory deals with getting more concrete, present results. It is also a theory of military effectiveness, though it also deals with other aspects of conflict as well. If NATO's theory of victory is to destroy as many targets as possible to stop the war immediately, what happens if we fail? A theory of security, on the other hand, provides a basis for long-term security and to avoid war in general. Facilitators argued NATO needs structural improvements and redesigns of militaries for any theory of security to succeed. In addition, resilience for NATO societies is crucial if NATO is to sustain long-term war. To complicate matters, these theories can also undermine one another. In NATO's case, a theory of victory focuses on a short, fast war while theories of security promise success in the event of a long war. This can send contradictory signals to adversaries.
- 2. Theory of Strategic Rivalries:** This discussion specifically addressed possible outcomes of strategic rivalries, such as if one side in the rivalry collapses (Ottoman Empire). Sometimes, two sides can also accept different roles, such as that of the Netherlands and the UK. There can also be either a fuzzy or inconclusive end to a strategic rivalry. A good example is that despite the collapse of the Soviet Union, Russia still retains nuclear weapons, thus elevating its threat status. Finally, though 80% of rivalries in history ended in violence, this figure is lower in more modern times.
- 3. Current Challenges and Proposed Solutions:** NATO needs to update and increase its capabilities. This will likely involve changing its cost-effectiveness calculation for procurement. In the long-term, NATO can outcompete Russia in resources and industrial base but must overcome divisions within societies. Another issue is that Europe currently lacks a sense of urgency on building up its defence industrial base and is out of sync with the technological era. From a foresight perspective, NATO needs a common positive idea of the future and to convince its populations to fight for a common future. To this end, U.S. posture risks damaging the future of the Alliance. This is critical in that, if war with Russia comes, Russia will not be alone. A Russia aided by China and its industrial base would be a formidable opponent.
- 4. Russia and China: Chinese and Russian leaders have a converging interest:** overcome domination by the West. For example, China is targeting middle powers and nations in the global South (infrastructure, raw material extraction etc) as alternatives to Western offers of assistance. The panel discussed the playbook of rising powers initially playing by the hegemon's rules in order to enact change from within the system. These "system wars" are not contained by geography: China is very much involved politically and economically on the European continent.
- 5. Alternative Theory of Security for NATO:** NATO should begin by increasing arms deliveries to Ukraine and national commitments within the frameworks available. The Alliance should also do more in terms of political leadership education, specifically when it comes to adversary messaging. This will allow NATO to present a level of strategic ambiguity toward its adversaries and complicate adversaries' planning considerations by remaining unpredictable. NATO must not reveal where it is vulnerable or what might prevent the Alliance from fulfilling its defensive mandate.

READ AHEAD –

BREAK-OUT SESSION 2 – THINK LIKE A RUSSIAN (OR OTHER DICTATORS)

Red teaming is not a game; it is a deliberate act of intellectual aggression against our own plans. Used properly, it tears into cherished assumptions, exposes blind spots and forces decision-makers to confront uncomfortable truths before reality does. In strategy, planning, and foresight, its purpose is not to validate what we already believe, but to prove us wrong fast and cheaply. It injects rigor into alternative futures by challenging the consensus narratives that so often lead to surprise. Treat it as mere wargaming and it becomes theatre to simulate the enemy. Treat it as a disciplined challenge to our thinking and it becomes a strategic advantage by stress-testing strategies before reality does.

This session showed how disciplined red teaming can help NATO challenge assumptions, reveal blind spots, and stress-test strategies — turning adversarial thinking into a source of strategic advantage.

SESSION AIM:

**Introduce “Red Teaming”
beyond wargames and
close perception gaps
on Russian and other
potential opponent
intention**

BREAK-OUT SESSION 2 – THINK LIKE A RUSSIAN (OR OTHER DICTATORS)

Facilitators

- Mr. Guido Buccardi, Allied Command Transformation (ITA)

In Break-Out Session 2, participants put themselves in the mindset of Russian leaders and strategic planners through the red team concept. They looked at how Russia is trying to secure its own future and furthers its interests in opposition to those of NATO and the West. They also discussed how NATO should react to Russian actions and the implications for cooperation and competition over the next decade.

Here are 2 key points summarizing the discussion of thinking like a Russian:

- 1. Knowing the Russian System:** Across the different iterations of the session, facilitators and participants discussed Russian culture, structure, influences, and motivation. Specifically, the Russian system is based on loyalty, nepotism, and knowing someone rather than effectiveness. This makes Russian rationalizing different from that in the West, as the fear of loss carries more weight than the possibility of gain. While it is also important to understand the system, dictatorship is a somewhat mercurial arrangement, causing Western planners to overthink or overcomplicate how we view Russian decisions. This can lead to the misunderstanding that decisions made by Russian leaders result from systemic processes rather than whims of a dictator. However, NATO must still understand Russian culture. Without this understanding, the Alliance cannot even begin to understand the possibilities of Russian strategic decision-making. Instead, NATO will make assumptions based not on Russian culture, but on our own.
- 2. Lack of Effective Long-Term Strategy:** Participants also argued that because NATO does not adequately understand Russia, it is difficult to create an effective long-term strategy to counter Russian policies and actions that run counter to NATO's interests. The lack of a coherent strategy towards Russia makes it difficult to plan and operate effectively.

READ AHEAD –

BREAK-OUT SESSION 3 – PROACTIVE DEFENSE

NATO's identity as a defensive alliance has long been a source of unity and legitimacy. Yet in the emerging operating environment—defined by grey-zone competition, integrated multi-domain coercion and adversaries willing to act pre-emptively, a purely defensive mindsets risk ceding the initiative. Competitors are already shaping the battlespace politically, economically and cognitively before any armed confrontation begins, leaving NATO to respond on their terms. To avoid strategic surprise, the Alliance must be willing to confront a long-standing taboo; rethinking the role of offensive concepts, tools and posture within a defensive mandate. This is not about abandoning the principles of the Washington Treaty but about understanding that credible defence in the 21st century may require the capacity, and the will, to act first in certain domains. Without this shift, NATO could find itself impeccably prepared for the last move, while the decisive moves are made elsewhere.

This session considered how NATO can reconcile its defensive mandate with the need to seize initiative in grey-zone competition — exploring whether credible defense in the 21st century requires new offensive concepts, tools and postures.

SESSION AIM:

**Break the Taboo –
Rethink the role of
offensive concepts, tools
and posture.**

BREAK-OUT SESSION 3 –

PROACTIVE DEFENSE

Facilitators

- Mr. Gene Germanovich, SHAPE J3 (USA)
- Dr. Olesya Vinhas de Souza, NATO Defense College, (USA)

This discussion was based on brainstorming the following question: on a scale of 1-10, how proactively does NATO approach collective defence? Participants and facilitators assigned a value to their answer and expanded on their rating with more detailed responses to the question.

Here are the 3 key categories for the participants and their thoughts on NATO's proactivity toward collective defense:

- 1. NATO is mostly reactive:** Around half of the participants believed that NATO was not proactive enough in approaching collective defense. In their view, NATO was too reactive in crisis management and prevention. There was potential for NATO to influence societal and economic outcomes, but its slow response often led to collateral damage. NATO's need for effective influencing departments and narrative management is crucial. Participants acknowledged NATO's biggest strength and weakness is its nature as an alliance, which complicates decision-making and unity of action. There is a lack of clarity regarding NATO's capacity to act independently, especially when facing ethical dilemmas. The nature of NATO's identity and role is also ambiguous. NATO is also not adequately prepared, compared to adversary nations, when it comes to simulation exercises. The Alliance should further provide sufficient time for its planners to think long-term and improve the flow of information both within NATO and between NATO and the nations. Commitment to funding is insufficient, creating limitations in capabilities. Finally, interoperability and communication across the alliance need to be improved for more effective proactive actions.
- 2. NATO is somewhat proactive:** Some participants thought NATO was doing somewhat well at being proactive in its defense. They argued that NATO performs well in defense but struggles with collective action. There is a bifurcation at the operational level, with the North being more "ready to fight" than the South, suggesting division within NATO on philosophies of readiness. Resources and industrial capabilities are largely reactive, and issues of interoperability and standardization are evident. NATO's reluctance to take risks limits its ability to be proactive, as proactivity often involves inherent risks. Like the first group, these participants believed that communication within NATO remains challenging. They did argue military plans are generally proactive, with efforts focused on readiness and defined responses. However, NATO does not sufficiently plan for the long-term and needs to expand the use of deterrence strategies.
- 3. NATO is mostly proactive:** A third group of participants generally believed that NATO is proactive when it comes to defence. They believed that without NATO, Europe's defense landscape would be significantly weaker. However, increased cooperation, partnerships, and crisis management are needed. More exercises and better implementation of innovative tools could enhance NATO's proactive defense stance. Targeted deterrence (e.g., against terrorism) and better protection of critical infrastructure should be national priorities. There is also a need to improve strategies for fighting disinformation through new structures and audience analysis. While strategic-level actions are generally proactive, achieving interoperability and interchangeability at the operational level remains difficult. In addition, national barriers often prevent a more proactive defense planning process.

READ AHEAD –

BREAK-OUT SESSION 4 – MARVELOUS STAR TREK WARS: SCIENCE FICTION AND ART AS UNEXPLORED SOURCES FOR FUTURE THINKING

Dismissing art, science fiction and comics as “entertainment” is a strategic blind spot. These mediums have been prototyping futures—technological, political, and cultural, long before analysts dared to model them. They smuggle disruptive ideas past the gatekeepers of conventional thinking, revealing possibilities and risks our official reports often ignore. In an era where imagination itself is a competitive advantage, strategic foresight that ignores these creative laboratories risks planning for a world that no longer exists. The choice is simple: mine them now or be surprised later by the futures they already saw coming.

This session explored how science fiction, art and popular culture can serve as laboratories of strategic imagination — revealing disruptive possibilities and risks that traditional foresight too often overlooks.

SESSION AIM:

**Present and introduce
inspirations and triggers
for futures thinking and
potential trends**

BREAK-OUT SESSION 4 – MARVELOUS STAR TREK WARS: SCIENCE FICTION AND ART AS UNEXPLORED SOURCES FOR FUTURE THINKING

Moderator

- Dr. Florence Gaub, Director of the Research Division at the NATO Defense College in Rome (DEU/FRA)

Panelists

- Dr. Nicolas Minvielle, NDC (FRA)
- Marie Roussie, NDC (FRA)
- Hendrik Lesser, European Game Developer Federation President (DEU)

Key Takeaways:

- **Imagination is a Strategic Capability:** Science fiction, art, and popular culture function as informal labs, stress-testing ideas about power, technology, identity, and conflict decades before they enter policy debates.
- **Creative Media Reveal Blind Spots:** Artistic narratives often surface societal, ethical, and psychological dimensions of future conflict—such as AI agency, human–machine trust, or information dominance—that formal foresight frameworks struggle to capture early.
- **Futures Thinking Benefits from Emotional Engagement:** Unlike traditional reports, art and storytelling engage emotion as well as intellect, making future risks and opportunities more tangible and memorable for decision-makers.
- **Disruption Is Often Cultural Before It Is Technical:** Many strategic surprises originate in shifts in values, norms, and behavior. Science fiction and art frequently anticipate these cultural transitions ahead of analytical models.
- **Foresight Must Broaden Its Inputs:** Incorporating creative sources alongside data-driven analysis strengthens foresight by diversifying perspectives and reducing the risk of consensus-driven blind spots.
- **Creative Exploration Encourages Strategic Curiosity:** Exposure to speculative worlds fosters questioning, challenges assumptions, and helps participants think beyond linear projections—an essential skill in periods of rapid change.

READ AHEAD –

BREAK-OUT SESSION 5 – GREAT POWER RELATIONS IN THE 21ST CENTURY AND THE FUTURE OF INTERNATIONAL ORDER

With the rules-based international order in visible decline, the future global system may emerge in forms that challenge long-held assumptions about power, norms and legitimacy.

Cooperation – All great powers find ways to work together or at least manage rivalries peacefully, leading to collaborative problem-solving.

Collusion – Two powers (notably China and Russia) align against the US and Allies, creating a bloc that challenges the other, in a quasi-Cold War standoff.

Competition – A dynamic of intensified rivalry among all great powers without firm alliances or open war a multipolar contest for influence.

Conflict – Relations deteriorate into open conflict (proxy wars or even direct military clashes) – a potential Great Power War scenario.

This session explored how the complex relations between the US, China, Russia and to some extent Europe might evolve under different conditions: Cooperation, Collusion, Competition and Conflict.

SESSION AIM:

Introduce/discuss great power relations and scenarios for the future international order.

BREAK-OUT SESSION 5 – GREAT POWER RELATIONS IN THE 21ST CENTURY AND THE FUTURE OF INTERNATIONAL ORDER

Facilitators

- Dr. Mehmet Kinaci, ACT (TUR)
- Dr. Joseph Voros, Futurist (AUS)

Over the course of the breakout session iterations, discussions focused primarily on how the relationship between the U.S., China, Russia, and to some extent Europe might evolve under three different scenarios: Great Power upheaval (Conflict), Age of Empires – Yalta 2.0 (Collusion), and Pervasive Competition (Baseline).

Key Takeaways:

- **The Rules-Based International Order (RBIO) Is No Longer the Default:** Across all scenarios, the RBIO continues to erode. Whether through conflict, collusion, or pervasive competition, global order is increasingly shaped by power politics rather than shared rules—forcing NATO to operate in a less predictable, less institutionalized environment.
- **Great Power Conflict Is No Longer Unthinkable:** The Great Power Upheaval scenario highlights that simultaneous crises in Europe and the Indo-Pacific are plausible within the same strategic timeframe. Escalation risks, including nuclear signaling and grey-zone coercion, are rising, demanding sustained deterrence, and escalation discipline.
- **Collusion Trades Stability for Sovereignty:** A Yalta 2.0 outcome may reduce the risk of open war but comes at the cost of smaller states' autonomy and weakened multilateral institutions. Stability achieved through spheres of influence would fundamentally alter NATO's political purpose and legitimacy.
- **Pervasive Competition Is the Most Likely Baseline:** Enduring, system-wide competition—short of major war—emerges as the most plausible near- to mid-term future. This world is defined by constant contestation across military, economic, technological, and informational domains rather than decisive conflict or cooperation.
- **Military Power and Economic Resilience Are Increasingly Interlinked:** Across scenarios, a state's ability to sustain military operations is inseparable from its industrial base, supply chains, and technological edge. Geoeconomics has become a core element of strategic competition.
- **Hybrid and Grey-Zone Competition Is the New Normal:** Even in the absence of open war, hybrid pressure—cyber operations, disinformation, economic coercion, and sabotage of critical infrastructure—remains persistent across all futures, demanding constant vigilance and resilience.
- **NATO Must Prepare for Endurance, Not Just Deterrence:** The Alliance must plan for prolonged strategic competition marked by repeated shocks, contested domains, and societal strain. Readiness, resilience, and political cohesion are as decisive as forward-deployed forces.

READ AHEAD –

BREAK-OUT SESSION 6 – STRATEGIC FORESIGHT UNDER FIRE: WEAPONIZING WEAK SIGNALS

The most disruptive shifts in the future operating environment rarely arrive with clear warning - they start as weak signals: odd, outlying trends that sit at the edges of our attention. This session invites all attendees to step outside conventional threat frames to identify and interrogate these early indicators. By uncovering patterns that may currently seem marginal or implausible, we aim to surface insights with the potential to reshape NATO's strategic landscape. The discussion will connect these signals to plausible futures and draw out their implications for the Alliance.

This session revealed weak signals and overlooked trends, challenging participants to explore disruptive possibilities that lie outside conventional threat frames and could reshape NATO's strategic landscape.

SESSION AIM:

Introduce current weak signals analysis to draw implications for the future operating environment.

BREAK-OUT SESSION 6 – STRATEGIC FORESIGHT UNDER FIRE: WEAPONIZING WEAK SIGNALS

Facilitators

- Dr. Gabriele Rizzo, Longviews LLC. (ITA)
- Dr. John Sweeney, Longviews LLC. (USA)

For this breakout session, participants worked in small groups to look at unthought future, which are scenarios beyond current planning assumptions.

Here are the key takeaways that were common across the session's iterations:

1. Identifying and Weaponizing Weak Signals:

- **Weak signals are early leverage points, not background noise:** Seemingly marginal trends—environmental anomalies, social movements, or fringe technologies—often precede strategic disruption. Treating them seriously enables earlier positioning.
- **Adversaries already weaponize ambiguity:** Signals such as Arctic resource exploitation or biological risks from environmental change can be exploited below the threshold of armed conflict to generate strategic pressure.
- **Proactive use of weak signals shifts the initiative:** Systematic weak-signal analysis allows NATO and national institutions to move from reactive adaptation to proactive shaping of the strategic environment
- **Weaponization is not inherently military:** The most potent exploitation of weak signals often occurs in cognitive, economic, environmental, and societal domains—where attribution is difficult and escalation risks are lower.

1. Using Weak Signals to Prepare for the Future:

- **Exploring “preposterous futures” has strategic value:** Deliberately examining implausible scenarios—such as U.S. disengagement from NATO or Europe seeking alternative security architectures—helps stress-test assumptions and identify dependencies that require reinforcement.
- **Foresight strengthens cohesion by making risks visible early:** By surfacing potential fault lines in Alliance unity, weak-signal analysis enables earlier political dialogue and mitigation before crises force reactive decision-making.
- **Present crises are signals of future conflict:** Ongoing operational challenges should be treated not only as problems to solve, but as indicators of how future conflicts may evolve in speed, complexity, and domain interaction.

READ AHEAD –

BREAK-OUT SESSION 7 – HOW TO MOBILIZE IN THE FUTURE – RESERVES AND THE WILL TO FIGHT

NATO's reserve forces are a critical pillar of resilience, yet their design, recruitment and integration remain rooted in assumptions that are no longer true. Societal change, marked by declining social cohesion, demographic shifts and a reduced will to fight in parts of the West, raises urgent questions about the future viability of current reserve models. This session will examine how these trends could affect readiness, responsiveness and legitimacy, and will explore innovative approaches to recruiting, motivating and sustaining reserve forces across the Alliance. The goal is to identify actionable options to futureproof NATO's reserve system against the strategic, social and operational demands of the decades ahead.

This session examined how societal change is reshaping reserves and the will to fight, and will explore innovative approaches to sustain readiness, resilience and legitimacy across the Alliance.

SESSION AIM:

Explore and discuss analysis on how to futureproof the reserve structure with a change in social cohesion influencing the will to fight.

BREAK-OUT SESSION 7 –

HOW TO MOBILIZE IN THE FUTURE: RESERVES AND THE WILL TO FIGHT

Facilitators

- Dr. Roderick Parkes, NATO Defense College (GBR)
- Dr. Michael Rostek, Centre for International and Defence Policy (CAN)

This session looked at a critical aspect of future warfare: the will of NATO societies to fight and how to mobilize reserves in the event of large-scale conflict. The facilitators asked participants to utilize the 3-Horizons framework to help understand and anticipate the will of NATO societies for military service. There were three main points captured across the sessions:

There were three main points captured across the sessions:

- 1. Institutional Trust is Critical:** Populations must trust their governments and believe in their purpose. Therefore, governments must have clear messaging and open communication with their populace. This is also important when it comes to common threat perception. A common threat perception is needed to mobilize societies; the current threat perception is too dispersed intra-Nation and cross NATO. There is a growing danger of pessimism about the future among the younger generation in NATO. If left unchecked, this pessimism could become self-fulfilling. Governments must show their populations the value of democracies, drive for economic improvement, and the benefits of service and what is available to them in the military structure.
- 2. There is no “one size fits all” approach:** What works in one country will not work in every country. Different states and cultures will require different approaches to mobilization and increasing the willingness to fight. Sweden will mobilize and motivate differently than Italy. Countries will have to balance between a cause of greater good and pragmatic approach to mobilization. The will to fight is a give and take relationship between militaries, governments, and civil society.
- 3. Mobilization Considerations:** There is a growing problem between quality of service provided by untrained reservists. In addition, countries must balance societal mobilization with mobilization of the reserves. One emerging approach is to reconceptualize mobilization through a business-model lens. Rather than treating all reservist roles as equal, this model allocates resources, training, and readiness requirements according to where they generate the greatest strategic “return on investment.” High-value functions—cyber defense, logistics surge capacity, medical support, and niche technical skills—could be prioritized for sustained training pipelines, incentives, and integration with active forces. Lower-priority tasks might shift toward more flexible, on-demand structures or civilian–military partnerships. A business model may also help with creative solutions to solve unique problems, though there remains the challenge of implementation.

READ AHEAD –

BREAK-OUT SESSION 8 – TABLETOP FUTURE CHESS WARGAME

Future Chess is a fast-paced, foresight-driven board game that transforms the global stage into a living chessboard. Designed for small groups, it challenges participants to embody key players, whether great powers like the United States, China or Russia, or pivotal organizations such as NATO, the EU or the United Nations. Acting alone or in teams, players must think several moves ahead: forging alliances, taking risks and navigating the delicate balance between competition and cooperation.

Far more than a game, Future Chess is a wargaming experience that sharpens strategic instincts and sparks fresh insights into the challenges of tomorrow. At the Allied Foresight Conference 2025, it offers attendees the chance to play out alternative futures, pressure-test decisions and see how the interplay of ambition, uncertainty and foresight can reshape the international order.

This session immersed participants in a foresight-driven wargame, enabling them to explore alternative futures, test strategic decisions and understand how ambition, uncertainty, and cooperation shape the international order.

SESSION AIM:

Introduce this interactive science fiction experience and give attendees a chance to touch future scenarios.

BREAK-OUT SESSION 8 – TABLETOP FUTURE CHESS WARGAME

Facilitators

- LTC Bernd Weissenberger, NATO's Modelling and Simulations Centre of Excellence (DEU)

This breakout session introduced participants to a new type of chess wargame. It was also a required session if participants wanted to play the game on the following day.

The captured main key insights across the various sessions were:

- Players discover that strategic restraint and selective partnership yield the highest long-term gains. Cooperation is not the opposite of competition, but a tool for managing it.
- Misperception and reactive decision-making can lock actors into confrontational patterns, even when no one seeks conflict.
- Future geopolitics may be less about fixed alliances and more about dynamic, situational bargaining.
- Over-cautious strategy can be as dangerous as reckless ambition, inviting disruption through inaction.
- Crises escalate faster than intentions—and how diplomacy must race to keep pace.



READ AHEAD –

BREAK-OUT SESSION 9 – CRISIS ROOM 49 – COMMANDING THE FUTURE AND UNITING DEFENSE

Crisis Room 49 is an immersive experience that reimagines the future of crisis control and security response. Set within a speculative environment, it presents participants with a series of designed objects and tools that represent possible futures of crisis management.

Rather than simply observing, participants are invited to engage by exploring, labelling, sorting and stress-testing these artifacts. This hands-on process opens space for reflection: What feels useful? What is missing? What could have real impact?

At its core, Crisis Room 49 is a platform for dialogue and imagination. It challenges assumptions, surfaces new ideas, and encourages participants to envision more resilient and adaptive approaches to security and crisis response in the years to come.

Crisis Room 49 invited participants to critically reflect on the evolving nature of collective security and to imagine the tools and strategies needed to confront the crises of tomorrow.

This session engaged participants in a hands-on exploration of emerging crisis management tools, encouraging reflection, dialogue, and creative thinking about resilient and adaptive approaches to future security challenges.

SESSION AIM:

Introduce this interactive science fiction experience and give attendees a chance to touch future scenarios.

BREAK-OUT SESSION 9 – CRISIS ROOM 49 – COMMANDING THE FUTURE AND UNITING DEFENSE

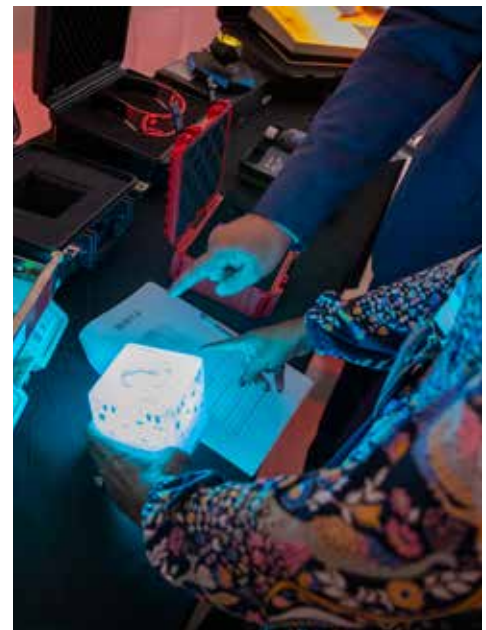
Facilitators

- Dr. Martin Waehlich, Office for Dreams (DEU)

This breakout session allowed participants to experience a fictitious yet possible future environment and make decisions that impacted on the security environment.

Attendees experienced across the different rotations mainly:

- How future crises may reshape the texture of command, communication, and cooperation.
- Discussions about how NATO and its partners might navigate unknown technologies, unfamiliar actors, and unexpected crisis dynamics. The experience mirrors the uncertainty of real-world early-warning environments.
- Comparing interpretations illuminates how perspective shapes decision-making, and how diverse viewpoints can surface blind spots otherwise missed.
- This hands-on testing highlights where future systems may fail, adapt, or evolve, generating insights into resilience requirements.
- Many walk away with the realization that future crises may not conform to the logic of today's systems.



READ AHEAD –

PANEL 1 – FROM STRATEGIC FORESIGHT ANALYSIS (SFA) TO THE FUTURE FORCE (CLASSIFIED – NATO ONLY)

PANEL DISCUSSION: HOW DO WE BETTER DECIPHER FUTURES IMPLICATIONS TO ESTABLISH FORCE DESIGN AND ENABLE TIMELY DEVELOPMENT?

With Allies committing to higher levels of defence spending, the challenge is no longer only about resources but about ensuring those investments are wisely directed. This requires sharpening NATO's ability to decipher the implications of long-term trends and futures insights, and embedding them into coordinated planning, capability development, and force design.

Panelists brought national and institutional perspectives to highlight best practices, challenges and opportunities for aligning foresight with timely force development. Designed as an interactive discussion, the session also engaged the audience to capture broader national viewpoints and professional experiences.

The outcome aims to inform how foresight can better support operational requirements, ensuring that increased defence investments translate into coherent, resilient and future-ready forces.

This panel examined how foresight is operationalized across NATO's key processes, from the Strategic Foresight Analysis (SFA) through the Future Operating Environment and into the NATO Defence Planning Process (NDPP). A central focus will be on two interlinked questions: How can NATO and its nations better translate long-term trends and foresight insights into concrete force-design choices, and how do we ensure that increased defence investment is directed toward capabilities that are future-relevant rather than reactive?

- **Designed as an interactive discussion, the session will also engage the audience to capture broader national viewpoints and professional experiences on:**
- The **biggest mismatch** between NATO's current force design and the future threats we anticipate.
- How to avoid the trap of investing to fight today's war not the war of the future?
- The potential blind spot in the Alliance's current approach to foresight and defence planning.

PANEL 1–

FROM STRATEGIC FORESIGHT ANALYSIS (SFA) TO THE FUTURE FORCE (CLASSIFIED – NATO ONLY)

Moderator

- Commander Jason Stewart, Allied Command Transformation (CAN)

This panel focused on operationalizing foresight, aiming to ensure that long-term trends and strategic insights are embedded in NATO's core processes, from force design to the NATO Defence Planning Process (NDPP).

Panelists

- Brigadier General Markus Schetilin, Assistant Chief of Staff, Shaping and Policy Analysis, Allied Command Transformation (DEU)
- Mr. Steen Soendergaard, Chief Scientist, NATO Science and Technology Organization (DNK)
- Mr. Neil Rawsthorne, Head of Futures, UK Ministry of Defence (GBR)

Due to the classified nature of this session, notes will not be presented here.



READ AHEAD –

PANEL 2 – PUBLIC PANEL ON FUTURE-PROOFING RESILIENCE AND READINESS: ENHANCING THE DETERRENT POTENTIAL OF OUR INDUSTRIES, ECONOMIES AND SOCIETIES.

At the NATO Summit in The Hague, Allies reached transformational decisions, laying the foundations for a stronger, fairer and more lethal NATO. The summit has set high ambitions, which will be transformational, not just for our militaries, but also our industries, academia, economies, and wider societies. Resilience and readiness are key to this new ambition.

The NATO Defence Investment Pledge agreed by Allies set significant commitments. By 2035, Allies will spend 5% of GDP annually on core defence requirements as well as defence and security-related spending, to ensure that NATO has the “forces, capabilities, resources, infrastructure, warfighting readiness, and resilience needed to deter and defend in line with our three core tasks of deterrence and defence, crisis prevention and management, and cooperative security.”¹

Delivering warfighting advantage will require transformation in our industries, economies and our wider societies. Cohesive societies can become a deterrent power when equipped with the right tools: when they understand the stakes, when they can be resilient enough to sustain pressures and bounce back, and when they can enable and sustain a deterrence and defence effort.

A “whole-of-society” approach is needed to underpin and accompany the enhanced deterrent and defence posture NATO’s capability targets and investment plans aim for. Crucially, as part of the new pledge, Allies agreed to allocate 1.5% of their GDP annually toward civil preparedness and resilience to enable the execution of NATO and national defence plans.

This public panel focused on how strategic foresight is and can be used to assess and imagine how we can adapt our non-military instruments of power – in industry, academia, the economy and wider society – as part of a whole-of-society approach.

- **Through representatives from national governments, industry NATO, and international organizations, the panel will seek to explore the role of foresight (actual and potential) in:**

- Shaping deeper situational awareness, strategic culture and intellectual resilience.
- Stress-testing current strategies, policies, and plans, and challenging existing paradigms and ways of working.
- Reframing partnerships and stakeholder relationships – across government, industry, academia, society and the economy.
- Raising awareness of citizens and the wider public of the stakes, strengthening the “will to fight.”

Across these areas, panelists will be invited to identify what the challenges and gaps are, what the promising leads are and what remains to be done, if we seek to secure deterrence and defence advantage – and how we can use foresight to this end.

PANEL 2–

PUBLIC PANEL ON FUTURE-PROOFING RESILIENCE AND READINESS: ENHANCING THE DETERRENT POTENTIAL OF OUR INDUSTRIES, ECONOMIES AND SOCIETIES.

Moderator

- Cr. Ruben Diaz-Plaja, NATO Headquarters (ESP)
- Dr. Elizabeth Chalecki, University of Omaha (USA)

Panelists

- Ms. Amanda Timms, UK Ministry of Defence (GBR)
- Colonel James Groves, AUS Department of Defence (AUS)
- Mr. Julien Kita, Director, Defence Enablement and Resilience, NATO Headquarters

Key Insights from the Panel:

- Resilience has become a core pillar of deterrence, not an auxiliary function. Resilience requires sustained, not reactive, investment, as shown by Nordic models of whole-of-society preparedness. Deterrence by resilience means being able to absorb shocks and continue operating, increasing the costs for adversaries. The 1.5% resilience pledge is a strategic breakthrough, signaling that defending the home front is as important as generating military power.
- Whole-of-government approaches are now essential, as crisis dynamics cross borders, sectors, and ministries. Hybrid threats target societal seams, making public trust, cohesion, and communication part of NATO's front line. Military readiness depends on civilian readiness, with up to 90% of mobility and logistics reliant on private-sector infrastructure. Nationalism can be both a risk and a strategic asset, depending on how governments channel public sentiment.
- Climate change is a strategic threat multiplier, driving crises that will reshape NATO's operating environment.
- Foresight must guide choices about what to make resilient, ensuring resources are allocated to the most strategically critical systems. Pollsters and societal researchers should inform foresight, helping leaders anticipate shifts in public perception and political will. Middle powers are increasingly influential, requiring foresight tools that help them prioritize under resource constraints.
- Supply chains and information ecosystems are new battlegrounds, requiring anticipatory governance and diversified dependencies.

CLOSING SESSION - SO WHAT FOR NATO



Moderator

- Brigadier General Paul Ducheine, NATO Defense College (NLD)

Panelists

- Lieutenant General Max Nielsen, Commandant, NATO Defense College (DNK)
- Dr. Tim Sweijs, The Hague Centre for Strategic Studies (NLD)
- Mrs. Lucrezia Sala, NATO HQ Policy Planning Unit – Office of the Secretary General

Key Insights from the Panel:

Generational Adaptability as a Strategic Asset

- Today's younger generation has matured in an environment defined by hybrid threats, information warfare, systemic instability, and climate disruptions.
- Risk is normal to them, not exceptional; this creates a cohort that is inherently more agile, tech-literate, and resilient under uncertainty.
- Rather than being naïve or disengaged, younger citizens often display pragmatic, solutions-driven attitudes toward complex security challenges.

Enhancing NATO's Early-Warning Mindset

- Militaries must sharpen their capacity to detect weak signals and emerging trends before they spike into crises.
- Early awareness and anticipatory thinking reduce strategic surprise and enable proactive posture adjustments.
- This requires both technological tools and institutional cultures that reward curiosity and questioning.

Avoiding Cognitive Traps in Future Planning

- NATO risks over-concentrating on a single scenario—currently, large-scale conventional conflict—while overlooking asymmetric or unconventional threats.
- Cognitive biases such as availability bias, mirror-imaging, and groupthink can lead to dangerously narrow planning assumptions.
- Preparing for one future shapes that future: adversaries react to our preparations, so flexibility is essential.
- The Alliance must balance long-range forecasting with real-time adaptability to remain strategically agile.

Operational Lessons from Ukraine

- Ukraine’s experience shows the power of whole-of-society resilience—mobilizing civilians, businesses, volunteers, and NGOs alongside the military.
- Despite years of observing drone proliferation, NATO was still caught unprepared for the scale and speed of unmanned systems in warfare.
- Current dynamics—expensive defensive systems countering cheap drones—highlight the need for innovation, affordability, and scalable solutions.

The Imperative of Intellectual Agility

- NATO must “enter the jungle”: explore new technologies, test novel operational concepts, and push boundaries before adversaries do.
- Continuous engagement with diverse experts—from technologists to sociologists to private-sector innovators—is essential for robust foresight.
- Institutions should encourage open debate, constructive dissent, and a culture that welcomes challenge rather than consensus comfort.
- Adaptation is not episodic but constant; learning loops must be embedded into NATO’s organizational DNA.



CONCLUSION

So what for NATO? What is your main take away?



Strategic foresight requires common purpose and the humility to consider “unthought” but possible futures. Allied planners must be willing to test long-held assumptions against new evidence, consider the broad range of possibilities of new technologies, and to step into the minds of NATO’s adversaries to understand their desired futures and how they may try to achieve those futures. Finally, it is important to remember that the enduring strength of the Alliance is its people and their dedication to trans-Atlantic security.

The challenges we face as members of the NATO Alliance are complex, but we have the advantage of the collective intelligence of 32 nations united in common purpose. We are

also fortunate to have the good will and expertise of Partner nations around the world that share our desire to maintain global peace and security. The future of warfare will not be decided in any single capital or command centre. It will be shaped by networks like those at this conference, people who are willing to share knowledge, bridge divides, and work across boundaries.

The conversations that began in Rome cannot and should not end there. Participants should stay in touch and continue to build on what they learned and to cultivate new and existing relationships. The Allied Foresight Conference should be a starting point, but the real work – the collaboration, innovation, and

hard thinking – will continue in the months and years to come.

Both the Lieutenant General Nielsen and General Colagrande thanked the participants for their hard work and willingness to share ideas, engage in debate, and think outside of the box when planning for the future. Both leaders stressed the critical work that still needs to be done, and the important roles of both the NATO Defense College and Allied Command Transformation in NATO’s strategic foresight efforts. They commended the conference attendees for their previous work on strategic foresight and highlighted the important work that lays ahead.

KEY NOTE SPEAKERS

(Chronological Order of Appearance)



Lieutenant General Max A.L.T. NIELSEN
Commandant
NATO Defense College
Speaker, Opening Keynote, panelist and Closing Remarks



General Aurelio COLAGRANDE
Deputy Supreme Allied Commander Transformation
NATO Allied Command Transformation (ACT)
Speaker, Opening Keynote and Closing Remarks

SPEAKERS & MODERATORS

(Chronological Order of Appearance)



COL Eric de LANDMETER
NATO Defence College
Master of Ceremony



Ms Dayle STANLEY
Director Europe & NATO
Department of Defence,
Australia

Panelist, Panel 1: Same world / Different futures
Global Perspectives on Uncertainty



Mr Anders INDSET
Philosopher & Deep-Tech
Investor

Speaker: KEYNOTE
The next (rules based?)
international Order – A
major driver of change



Ms Geraldine WESSING
Chief Political Analyst
Shell

Panelist, Panel 1: Same world / Different futures
Global Perspectives on Uncertainty



Dr Joseph VOROS
Futurist

Panelist, Panel 1: NATO
and Allied Perspectives on
Multi-Domain Operations: A
Common Understanding?



Col Wenxian HONG
Director Strategic Futures
Ministry of Defence,
Singapore

Panelist, Panel 1: Same world / Different futures
Global Perspectives on Uncertainty



Dr Florence GAUB
Director of the Research
Division

NATO Defence Collage
Moderator, Panel 1: Same world / Different futures
Global Perspectives on Uncertainty



Dr John SWEENEY
Partner
LONGVIEWS

Panelist, Panel 1: Same world / Different futures
Global Perspectives on Uncertainty



Dr Gabriele RIZZO
Executive Partner
LONGVIEWS
Speaker: KEYNOTE
Preposterous Futures The
“unthought” futures



Dr Oriana MASTRO
Stanford University
Panelist, Panel 2:
Adversaries’ Agendas –
How Russia and People’s
Republic of China see
the Future Operating
Environment



Dr Regina KARP
Old Dominion University
Moderator, Panel 2:
Adversaries’ Agendas –
How Russia and People’s
Republic of China see
the Future Operating
Environment



Ruben DIAZ-PLAJA
Acting Head of PPU
NATO HQ
Moderator, Panel 3:
Future-proofing Resilience
and Readiness:
Enhancing the deterrent
potential of our industries,
economies and societies



Dr Andrew MONAGHAN
NATO Defense College
Panelist, Panel 2:
Adversaries’ Agendas –
How Russia and People’s
Republic of China see
the Future Operating
Environment



Dr Elizabeth CHALECKI
University of Omaha
Panelist, Panel 3: Future-
proofing Resilience and
Readiness:
Enhancing the deterrent
potential of our industries,
economies and societies



Francesca BURATTI
ACT Strategic Foresight
NATO Allied Command
Transformation (ACT)
Panelist, Panel 2:
Adversaries’ Agendas –
How Russia and People’s
Republic of China see
the Future Operating
Environment



Amanda TIMMS
Assistant Head of
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Ministry of Defence,
United Kingdom
Panelist, Panel 3: Future-
proofing Resilience and
Readiness:
Enhancing the deterrent
potential of our industries,
economies and societies



COL James GROVES
Department of Defense,
Australia

Panelist, Panel 3: Future-proofing Resilience and Readiness:
Enhancing the deterrent potential of our industries, economies and societies



Julien KITA
Director Defense
Enablement and
Resilience
NATO HQ

Panelist, Panel 3: Future-proofing Resilience and Readiness:
Enhancing the deterrent potential of our industries, economies and societies



Brigadier General Paul
DUCHEINE
PhD

NATO Defense College
Moderator, Panel 4: So what and what now for NATO?



Dr Tim Sweijs
Director of Research
The Hague Centre for
Strategic Studies

Panelist, Panel 4: So what and what now for NATO?



Mrs. Lucrezia Sala
NATO HQ Policy
Planning Unit – Office
of the Secretary
General

Panelist, Panel 4: So what and what now for NATO?



General Markus
Schetilin
ACT ACOS SPA

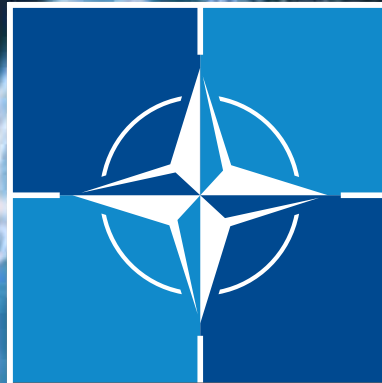
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Let's shape the future together.
Tomorrow starts today.



**TOMORROW STARTS
TODAY**



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ROME, ITALY
07 - 09 OCTOBER 2025

