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Allied Command Transformation
Norfolk, Virginia | USA

ALLIED COMMAND TRANSFORMATION
STRATEGIC FORESIGHT ANALYSIS 2023

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The futures thinking of various nations and stakeholders within the Alliance do not align by default. Therefore, systemic efforts are necessary to create a shared baseline and understanding of relevant trends and trajectories which affect the transformation of the Alliance`s Military Instrument of Power.

The Strategic Foresight Analysis 2023 (SFA23) updates assumptions and extends the focus of the previous Strategic Foresight Analysis (SFA17) to assess the major drivers and most relevant implications of the Alliance`s Evolving Security Environment until 2043. SFA23 assumes that present attitudes of strategic competitors will remain enduring amidst increasing global challenges and disruption in the forthcoming period, thus it is a decidedly risk-oriented foresight study. This analysis provides a solid baseline for the Future Operating Environment Study 2024, which will assess the evolving characteristics of actors, the battlespace and the modern warfare.

Even though the knowledge generated by strategic foresight is not scientific, this Strategic Foresight Analysis is the result of extensive research, robust collaboration with Allies and Partners and input from other future-oriented work strands within the Allied Command Transformation.

The SFA23 research was closed on 15 November 2023.

THE EVOLVING SECURITY ENVIRONMENT

A negative pathway of limited global cooperation and outright competition, resulting in a trajectory from a fragmenting world to pervasive competition, is the most likely and most demanding pathway for the Alliance.

PATHWAYS OF EVOLUTION

As introduced in the Methodology chapter, the `Four Worlds`(Annex A) model was used to explore generic futures, out of which the Strategic Foresight team discarded the low disruption, high cooperation scenario as not probable. As a result, three generic futures have been assessed against workshop findings, with the `Fragmenting world` (the Alliance`s Strategic Environment as defined in the Strategic Concept 2022) as a baseline, `Global cooperation` as the positive scenario and `Pervasive competition` as the negative scenario. During the workshops and engagements with Allies and Partners, the overwhelming opinion was consistently negative regarding the short and midterm outlook of the Alliance`s security environment. Additionally, the SFA23 has decidedly taken a risk-oriented approach to inform ongoing considerations in warfighting development and defence planning. As a result, the `Pervasive competition` [high disruption, low cooperation scenario (see Appendix A) was most likely and informative to properly assess the risks and challenges to the Alliance] pathway has been explored in detail and constitutes the core assessment of the SFA23. Notwithstanding, this chapter will also provide a brief discussion on the other scenarios.

Fragmenting world.

The starting point is defined by heads of states and governments in the Strategic Concept 2022 (SC22) and reinforced in the Vilnius Communique by Heads of States and Governments in 2023. It portrays an already fragmenting security environment where the European security order is violated by the Russian Federation. Authoritarian actors are challenging Allied interests and values through contestation in space and cyber domains, as well as through hybrid means, while undermining multilateral norms and institutions. Terrorism, in all its forms and manifestations, is the most direct asymmetrical threat and non-state armed groups are exploiting conflict and weak governance. For example, conflict, fragility, and instability in North Africa, the sub-Saharan region, and the Middle East affect NATO's security and enables destabilizing interference by external actors.

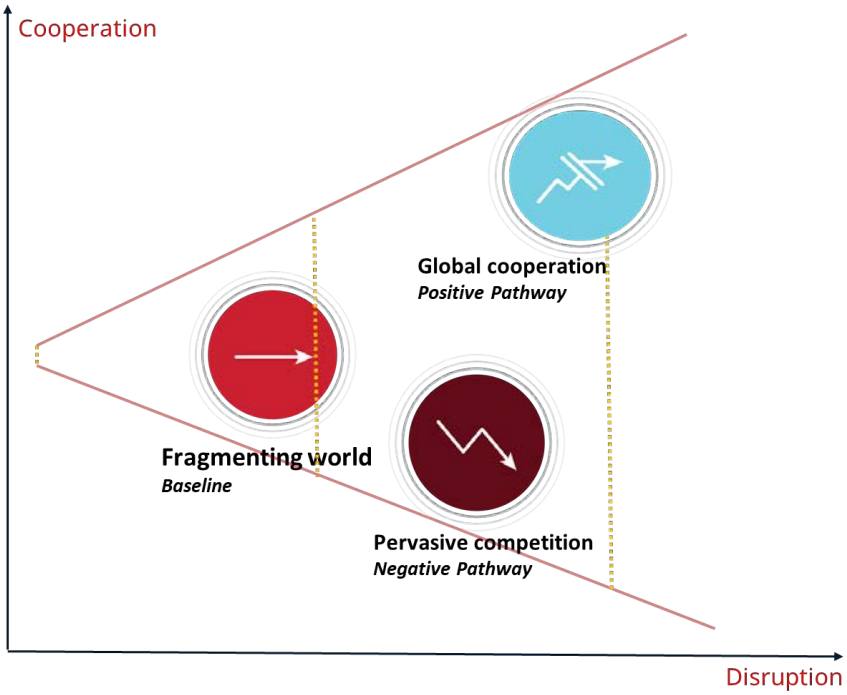

Figure 4: Pathways of the Evolving Security Environment

Likewise, the development of the processes in the Black Sea region is of crucial importance for the Euro-Atlantic area. In addition, China employs a wide range of political, economic, and military tools to increase its global footprint and project power. Furthermore, erosion of arms control, disarmament, and non-proliferation negatively impacts strategic stability. Climate change is also a defining challenge and a threat multiplier with profound impact on Allied security, armed forces operations, and infrastructures. As recognized in the SC22, pervasive instability results in violence against civilians, including conflict-related sexual violence, and these trends pose serious transnational and humanitarian challenges.

The increasing frequency and extent of strategic shocks and the disruptive impacts of changes in digital, economic and security systems necessitate further deliberations to understand how the strategic environment as assessed in the SC22 will continue to evolve.

Pathways of the Future. The SFA23 assesses two possible pathways for the evolution of a baseline security environment as defined in the SC22: Global Cooperation and Pervasive Competition. Changes are primarily driven by increasing disruptions posed by climate breakdown, resource scarcity, technology transformation, and transitions in the international order. Actors (state and non-state alike) respond to these changes through changing attitudes and behaviour. As a key variable, cooperative behaviour in critical areas leads to a more benign scenario, whereas less cooperation leads to a higher level of disruptions and competition.

GLOBAL COOPERATION

The positive pathway of the Alliance`s Evolving Security Environment assumes changing attitudes of potential adversaries and actors. It drives an enhanced level of cooperation on a global scale to address increasing disruptions and global challenges. It entails global coordination to mitigate and adapt to climate change, and to provide to fragile and developing states financial assistance and access to technology. This will support their efforts to green energy transition, to reinforce or build critical infrastructure, and to tackle poverty, gender-based inequality and uneven access to resources.

In addition, it requires governance on EDTs and in the global commons, for example space traffic management, as well as shared efforts to provide freedom of navigation, to counter violent extremist organizations and to promote international stability. Arms control agreements for conventional, nuclear, and emerging and disruptive technologies and systems would further assure strategic stability and enhance cooperation and dialogue.

However, such a development is unlikely while the Russian Federation continues to violate the territorial sovereignty of Ukraine, and maintains its hybrid activities, which precludes greater cooperation. Additionally, potential adversaries of the Alliance or Allied states maintain assertive postures and influence to promote alternative norms and regimes. Additionally, strategic competitors of the Alliance can be expected to continue exploiting vulnerabilities in the international system, abstaining from global efforts to provide credible response to global challenges and from establishing new frameworks to promote strategic stability.

PERVASIVE COMPETITION

Accordingly, a negative pathway of limited global cooperation and outright competition, resulting in a trajectory from a fragmenting world to pervasive competition, is more likely. In such a scenario, the green energy transition remains disorderly, the extent of disruptions remains unbounded, multiplying challenges to states, societies, institutions and international norms. Strategic competitors, in anticipation of a degrading security environment, will likely expand operations to gain strategic advantage, to include dominance in the non-traditional and non-geographic domains, such as space and cyber. They will compete with the Alliance in a multi-dimension theatre of physical, cognitive and virtual dimensions, at all times.

Pervasive competition will likely exacerbate the impact of disruptive developments, instabilities, and shocks. Potential adversaries will attempt to exploit these disruptive changes as opportunities to expand influence, shape and contest to ultimately confront the Alliance. Hence, it is of key importance to anticipate and understand such changes along with their implications to the Allied instruments of power.

CHARACTERISTICS OF THE EVOLVING SECURITY ENVIRONMENT

In the most likely pathway, the Evolving Security Environment of the Alliance will continue fragmenting, leading to pervasive competition with potential adversaries in all domains and across all dimensions. Such an environment will exhibit increasing complexity, congestion, commercialization, contestation and confusion.

Complexity: Interdependence and shared vulnerability of economies will continue to grow in space, digital services, and critical resource supply chains. High levels of interconnectivity and interdependence, coupled with heightened competition will continue to complicate international affairs amidst increasing frequency and extent of disruptions.

Global strategic competitors will attempt to promote alternative economic, digital and security systems and expand their influence through diffusion of investment, technology, and power projection. Simultaneously they will likely seek for limited cooperation and retain dialogue, thereby increasing ambiguity of their objectives.

States and empowered non-state actors will scramble for critical resources while simultaneously they will also need to cooperate in providing global responses to global challenges. Despite the imperative for international collaboration to address these challenges, there is an observable diminishing willingness and effectiveness in such collective endeavours. Cooperation and competition will thus likely take place simultaneously.

The variety of actors, attitudes, behaviours, and disputes will increase significantly with empowered human networks and an increasing number of state actors acquiring advanced technologies. This will impact the balance of power generated on the inter- and intra-state levels. Novel frameworks of security cooperation may form as the cost and complexity of warfare increases. This will likely introduce an environment consisting of multiple military alliances.

Boundaries between cooperation, rivalry, and confrontation are already eroded, and technology will further enhance this process. The proliferation of actors and activities in largely ungoverned domains will further increase complexity. Technology advancement and the emerging centrality of non-geographic domains will increase in scale, speed, and distance of actions and effects. Differing rule sets related to advanced technologies and international affairs will further complicate cooperation.

Infinite alternative worlds may emerge in the virtual dimension, unbounded by physical limitations, and eventually the convergence of physical and non-physical (virtual) realities fused into metaverses will further increase variations of realities and perceptions. The expansion of competition from the physical to virtual and cognitive dimensions significantly impacts the continuum and character of conflict. This will likely shape the attitude and behaviour of actors towards more focus on resilience and on the increased exploration of pre-emptive measures.

Congestion: Climate breakdown as well as inequitable and diminishing access to resources will drive actors into new theatres. Changing climate conditions and expanding instabilities will accelerate shifts in both behaviour, attitude and actions of populations, especially in the most severely impacted areas.

Migration, regular and irregular alike, will be a major driver for increased population densities likely in the Northern Hemisphere. Cities will continue to expand by absorbing rural populations. Congestion will also significantly increase in the global commons, with an increasing number of commercial actors in space, cyber, atmosphere, the High Seas and the Poles. Both state and non-state actors will attempt to secure access and dominance within these domains. Accordingly, populations will congest in and around urban areas, critical resources, trade routes and infrastructures. Competition and confrontation may frequently arise to access and dominate these nodes of human networks. Climate

degradation will further contribute to competition for habitable areas and exploitable sea areas. The capabilities of actors will increase, enabling them to explore, exploit, and manoeuvre in all domains. Development and proliferation of sensors and autonomous systems will further increase congestion, but also interdiction, fire, lethality and attrition.

Commercialization: Limits of state power will increase dependence on more agile, scalable, and adaptable commercial service providers. Innovation is already led by the private sector and the gap between the state and private sector`s potential will likely increase further. Commercial actors will continue to act as distributed and effective networks, with better economies of scale and efficiency than state actors. Additionally, states` economic power will likely be impacted by series of shocks, the need to balance societal needs, adapt to the green energy and industrial revolution as well as provide for defence spending.

Increasing commercialization will likely proliferate into services in space, cyber, logistics, and telecommunication. The commercialization of security is extending to the military domain, with the expanding role of private military and security companies and violent non-state armed groups. Innovation in most EDTs will be driven by commercial non-state actors, and this surge is revolutionizing warfare. The commercialization of AI, biotechnology, and quantum technologies augments both the potential for innovation and the risk of misuse.

Contestation: Geopolitical rivalry will become more prevalent in a multipolar world. The erosion of RBIO would incentivize actors to resolve contradictions by challenging established rules. Emerging and revisionist powers may pursue strategic campaigns through novel combinations of power, exploitation of EDTs, or triggered by the perceived weakness of targeted states. Non-state actors will play an increasing role. Strategic competitors of the Alliance will be actively shaping, contesting, and confronting state and non-state actors in specific regions.

Strategic competitors will attempt to shape and contest the Alliance`s MIoP across all domains, as well as through the combination of IoPs to limit the effectiveness of the Allied fighting power. Such efforts will take place along the entire continuum of conflict, including in peacetime and may escalate into confrontation.

Confusion: The non-linear and non-gradual erosion of RBIO will incentivize actors to ignore or challenge established rules. EDTs will expand in both variability and usability, possibly incentivizing actors to pursue strategic surprise. The expansion of competition from the physical to virtual and cognitive dimensions will blur the continuum and character of conflict. Simultaneous actions for both cooperation and competition will further complicate anticipation, assessment, attribution, and response. Enhanced concealment of intent and capacities will defy physical limitations and increasingly confuse boundaries between traditional and non-kinetic forms of conflict, also challenging the traditional notion of state sovereignty. The changing character of competition, boundary, signal density, simultaneous manoeuvres, and converging effects will challenge the understanding of an actor's attitude and behaviour and various perceptions of competition. Aggression may take place in a distributed manner encompassing all domains, even in times of peace.

The likely pathway of the Evolving Security Environment supports the assessment of the NWCC which understands the changing character of war as persistent, simultaneous and boundless. This will also have enduring impact on the moral, conceptual and physical aspects of the Alliance`s fighting power and as such, needs to be analysed with a view to adapt the Alliance`s MIoP to remain fit for the future. SFA23 provides an initial analysis of the likely consequences under the `Initial Implications` chapter.

Drivers of Change

This chapter describes the most relevant strategic trends, organized into drivers of change which will significantly affect the Evolving Security Environment of the Alliance. (The `7 Drivers Model` (Figure 1) is discussed in detail in the Methodology section.)

The effects of these drivers are shaping all actors in the Alliance's security environment. Major disruptive change is caused by the Climate Breakdown and Loss of Biodiversity, Resource Scarcity Driving Instabilities, The Age of AI and EDTs converging, Geoeconomics Enabling Polarization, Human Networks Empowered, Scramble for the Commons and, as a result, International Order in Transition, all underlined by the detrimental effects of pervasive competition.

Climate breakdown and loss of biodiversity should be considered as the primary structural force that will have a profound impact on every aspect of the Evolving Security Environment. If unchecked, it will act as a threat multiplier, accelerating disruption and pervasive competition and causing further fragmentation. Societal instability, displacement and essential resource insecurity will pose a significant challenge to military operations across all domains as impacts escalate. This is an existential challenge for humanity.