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Forging the Future Leading NATO Military Transformation

Read Ahead

Future Framework for Alliance Operations
Workshop #1

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Royal Danish Academy of Sciences, Copenhagen Denmark

Organized by
Allied Command Transformation, Norfolk

In partnership with
Centre for Military Studies, University of Copenhagen



FFAO Workshop #1 - Task, Purpose and Outcome

Task: (1) gather a broad representation of NATO experts to further develop futures work; (2) review the shared perspective by discussing the security implications and their relevance to NATO; (3) align and prioritize the security implications with each of the three core tasks to answer the question of how NATO will conduct the core tasks in the long-term future.

Purpose: conduct an inclusive, collaborative, and transparent workshop in Europe to advance, publicize, and gain input to the development of NATO futures work, an organizing concept, and broad strategic requirements as the foundation for a Future Framework for Alliance Operations.

Outcome: security implications aligned and prioritized with the core tasks; potential ways for conducting the core tasks which may have military implications in the long-term future.



“NATO’s fundamental and enduring purpose is to safeguard the freedom and security of all its members...” NATO Strategic Concept 2010

Military readiness in a complex and dynamic future security environment requires NATO to anticipate and prepare for change. However, until recently, the Alliance’s method for implementing change, the NATO Defence Planning Process (NDPP), lacked a persistent methodology to examine the future security and operating environment and the degree of foresight necessary to determine and analyse the long-term security implications for NATO. That is why after consultation with the Military Committee (MC), Allied Command Transformation (ACT), in coordination and cooperation with Allied Command Operations (ACO), the International Staff (IS), and the International Military Staff (IMS) is now conducting futures work. The purpose of this work is to set the strategic context by both establishing a shared perspective of the long-term future and then developing a concept for how NATO should operate in that future.

The first part of our futures initiative, called Strategic Foresight Analysis (SFA), is a comprehensive study of a range of futures documents to identify commonalities, differences and gaps in their individual views of coming threats, challenges and opportunities and those factors that will drive outcomes which may be of concern to NATO. The purpose of the SFA work is to develop a shared NATO perspective of a future that will be different from today. To derive the shared perspective, SFA analysed drivers and trends organized around central themes or categories, and then developed an initial set of 28 security implications which may be relevant to NATO and to defence planning.

During FFAO Workshop #1 we will review and further analyse these draft implications to arrive at a collective understanding of their potential effects on NATO and the three core tasks its forces must execute. Recognizing the potential consequences these security implications could have on the Alliance level of ambition is a critical step in building the foundation of the second part of our futures work called the Framework of Future Alliance Operations (FFAO). FFAO will be an effort to determine how we should and could operate in the long-term future. We fully intend this work to be as inclusive, transparent and collaborative as possible. We especially want to ensure our efforts leverage and complement all on-going work in NATO, like the Enhanced NDPP. To this end we are building a wider community of interest that includes national representatives—Capitals, Military Committee, the Defence Policy and Planning Committee, Centres of Excellence, —as well as academia and think tanks that will contribute to this work.

We plan to build the FFAO by viewing the security implications through the lens of NATO’s three core tasks (Annex A) of Collective Defence, Cooperative Security, and Crisis Management, which we assume will remain viable and valid over the course of the coming years. However, as we anticipate and prepare for the challenges and opportunities of the



coming realities, we will seek to identify broad strategic requirements (BSR) that reflect and account for the norms of a new international security environment and their consequent military implications. To see the core tasks in a future context means aligning them with the relevant security implications for which the task is best suited. Once aligned, we will develop BSR that will lead to military implications. How we will eventually determine BSRs and military implications is through collaboration, transparency, in an iterative process conducted by a community of interest that will develop joint processes for BSR and military implication development. These steps will be the foundation of how we develop the FFAO.

Strategic Foresight Analysis

SFA leverages futures work undertaken by NATO, nations, academia, think tanks, industry and international organizations. Through on-going literature review, discussions and consultations held over the course of three workshops, and extensive dialogue, the futures team assessed that the long term future security and operational environment will be different from today. Many of the studies characterized the coming decades as more uncertain, complex and dangerous especially because of an accelerating rate of technological, social, and economic change. The interaction of major drivers with rapid technological development and human innovation will amplify the extent of these changes.

SFA initially identified twenty key drivers of change which it sorted into four major groupings: Political, Human, Physical and Resources and Economy. Of the twenty drivers, eleven were chosen and studied for those future security implications most relevant to NATO and included topics such as technology as an accelerant, global power-shift, absent shared threat perception, interconnected world, demographic shifts, global competition for resources, globalization of financial resources, health, disasters, WMD/E and climate. In all twenty-eight security implications were identified:

Security Implications

Driver #1 - Shift of Global Power

1. **A shift in the East/West economic power balance has consequences for NATO.** The consequences are twofold; subsequent rebalancing of global military power and North American focus looks away from NATO. Potential new power “blocs” in competition to NATO’s lead and influence, challenge NATO’s current strategic advantage.
2. **NATO’s role as a guarantor of security is called into question.** Changes in the global political landscape, could result in reduction of conventional threats to some European Alliance members. NATO’s role is further complicated by individual



nations' shift their focus and re-direct capabilities away from the Euro-Atlantic region.

3. **NATO's common values consensus is challenged.** New players present alternative values and principles, challenging those of the Alliance. Erosion of NATO's common-value base may degrade Alliance cohesion.
4. **NATO's ability to maintain an effective strategic narrative diminishes.** Because of the consequences of political, economic and security challenges, NATO could struggle in a changed world to maintain its appeal as a relevant security organization in the minds of its own citizens as well as the global community.

Driver #2 - Interconnected world

5. **Rising influence of non-state actors challenges NATO.** Independent, private military security companies (PMSCs) might compete with NATO as security providers. Super-empowered individuals' increase their role in political, economic and security landscapes. Greater FSE complexity will emerge due to increased number of global players.
6. **Internal tensions challenge NATO's coherence.** Changing political and economic landscapes create diverse national interests. Non-alignment of Alliance members' national interest on global issues impacts NATO's coherence.
7. **Legitimacy of NATO decision-making process is questioned.** Global political systems experience greater democratization. A more informed society demands greater participation in national and international politics. Subsequently NATO's decision-making process is challenged in areas such as "responsibility to protect" (R2P) and human security.

Driver #3 - Absence of a shared threat perspective

8. **Multiple threat perceptions amongst NATO members exist.** Diverging national, regional and functional priorities and perceptions makes NATO increasingly ineffective at the POLMIL level and subsequently unprepared at the military, operational level. Absence of a shared perspective may result in regionalisation and emergence of ad-hoc coalitions.
9. **NATO's ability to achieve strategic power projection degrades.** NATO's collective ability is weakened by individual nations deploying capabilities in support of national interest to mitigate their own perceived risks and threats. NATO's ability to perform strategic power projection is challenged as perceived threats change.



Driver #4 - Demographic Shifts

10. **An aging global population impacts NATO.** Widespread, but unequal aging has a two-fold effect that creates instability. In the developing world - increased fertility rates equates to a youth bulge. In the developed world increased welfare spending impacts defence budgets. Reduced fertility rates plus increased aging may also reduce the pool of available personnel for military services.
11. **Increased urbanization impacts NATO.** Population movement to expanding urban areas prompts the rise of mega-cities. Resource shortages and income disparities manifest themselves in dissatisfaction and civil unrest, which result in increased peace-support and stability operations in urban areas and an exposure to greater asymmetric threats.
12. **Shifting migration patterns yield diverse effects for NATO.** Natural, economic and man-made events yield diverse effects. Economics induced migration could revive western societies, compensate for declining indigenous populations thus supporting workforce and skills base; and/or internal unrest caused by immigrants' inability or resistance to culturally assimilate. Transnational extremist and criminal organisations may exploit this seam.

Driver #5 - Health / Disease

13. **On-going regional disparities in health persist.** Health disparities between the developed and the developing nations will likely increase. Developing nations will need further assistance to control and cure infectious diseases. NATO nations' deployed forces may be prone to diseases that are increasingly resistant to current treatments or medications.
14. **A global pandemic may impact NATO.** Weaker states may experience increased instability while wealthier, more stable states will focus resources and efforts to protect their populations. Ensuing tensions and competition for medical resources and cures, coupled with uncontrolled migration will fuel instability around NATO's borders with increased economic / security strain on Alliance.

Driver #6 - Technology as an Accelerant

15. **Emerging technologies present challenges for NATO capabilities.** FSE will be influenced in unexpected and non-traditional ways. Citizens will be able to identify more with groups or organizations rather than with the state's foundations of consensus and rule of law. Conflicting interests undermine state loyalty as a reduction or absence of unity born of common experiences, traditions, and rituals fuels "state" decline.



16. **Emergence of disruptive technologies potentially shrinks NATO's technical edge.** NATO's current technical advantage will be challenged by new technologies that potentially degrade NATO's political, military, social, economic, informational and infrastructure (PMSEII) capabilities.
17. **More effective countermeasures challenge NATO capabilities.** Availability of conventional and unconventional off the shelf capabilities may challenge NATO in three ways: willingness to engage in conflicts (kinetic/non-kinetic); reduced effectiveness when engaged; and choosing when to disengage.
18. **NATO's adaptability to change will be tested.** Confronting and adapting to rapid technological change faster than future adversaries will remain a challenge. Balancing greater off the shelf availability against NATO's current long-term R&D-based procurement cycle will be more difficult.

Driver #7 - WMD/E

19. **WMD/E proliferation will continue in mostly unstable global regions.** Nations most actively working to develop WMD/E are generally located in unstable regions of the world. NATO deterrence may not affect WMD/E proliferators whose aim is to blackmail or terrorize. Unconventional delivery methods, technological advances, and ease of access may threaten any nation.
20. **A lack of confidence in the international order may prompt states to acquire WMD/E to meet perceived threats.** Globalization, including transfer of dual-use commodities will cause a greater diffusion of technology. Detection and prevention of WMD/E pre-cursors and technology transfers will be increasingly difficult, enabling non-state actors to challenge the security of the Alliance at will.
21. **The commitment of a growing number of states to global disarmament and arms control will diminish.** This trend is most apparent in the nuclear arena where an erosion of the global nuclear order is well under way. A nuclear non-proliferation regime collapse would have strong repercussions and compromise global efforts to promote WMD/E restraint and marginalization resulting in increased WMD/E capable nations around NATO's borders.

Driver #8 - Globalization of Financial Resources

22. **NATO members' defence and security investments will fluctuate.** Financial markets' volatility will result in individual nations becoming stressed to maintain their planned defence spending. Consequently degrading Alliance military capabilities and increasing the need for improved co-operation and specialization mechanisms to mitigate capability gaps.



23. **Industry may not consider NATO's needs a business priority.** Defence requirements will be increasingly exposed to market forces. The defence industry may look beyond NATO for other lucrative civilian and military markets. Their R&D focus will no longer be driven by Alliance requirements and as a consequent NATO loses its technological edge due to limited access to non-western industrial advances.

Driver #9 - Geopolitical Competition for Resources

24. **Competition for diminishing resources arises amongst NATO members.** Nations will seek to secure dwindling resources for economic and security purposes resulting in competition, likely friction and possible conflict requiring a POLMIL response.
25. **NATO's increases its requirement for alternative energy sources.** Long-term hydrocarbon depletion, pollution and climate change coupled with a dependence on "external sources" located in unstable regions will see NATO held energy-hostage by anti-western groups or nations controlling access to critical resources. This will result in a requirement and competition for alternative energy sources.

Driver #10 - Climate Change

26. **Extreme weather events occurrences increase in frequency and intensity.** Increased occurrences of tropical cyclones, severe storms and tornadoes, coastal flooding, and drought cause extensive damage to infrastructure, arable land, habitat, and feedstock creating conditions for insecurity and instability. Famine, drought or flood driven populations forced migration exacerbated by expanding transnational criminal and extremist activity and border tensions will be a recipe for conflict.
27. **Rising temperatures will contribute to an increasingly accessible Arctic and Antarctic regions.** Ocean warming and reduced sea ice will foster greater access to and exploitation of previously inaccessible natural resources in the Arctic and Antarctic regions. Additionally, reduced seasonal ice no longer restricts use of maritime global trade routes prompting possible resource competition, which may expand beyond traditional Arctic Council nations and affect NATO members with regional interests or actual territorial claims.

Driver #11 – Disasters (Natural / Man-made)

28. **NATO's resilience in response operations will be tested.** Major disasters causing large scale devastation, extensive loss of life, and massive infrastructure damage will stress the economies and security of affected member states. These events may include earthquakes, tsunamis, volcanic eruptions, solar flares, gamma ray bursts, large meteor impacts and/or man-made incidents such as major oil spills, and industrial, toxic, or nuclear accidents. Although a national responsibility to react to



such events, NATO may be requested to support increased humanitarian and disaster relief operations.

Strategic Shocks

In addition to recognizing drivers and trends and their bearing on potential outcomes and security implications, it is important to recognize that low probability- high impact events may occur that will play a role in shaping future outcomes. These strategic shocks (also referred to as wild cards and black swans) are events that can alter defence conventions to such an extent as to force a re-evaluation of the strategic calculus, the perceptions of threat vulnerability and response options. While rare, the impact of these shocks requires prudent strategic hedging and constant monitoring of the environment for indications and warnings of their development.

Future Framework for Alliance Operations

The future security environment poses a range of significant threats, challenges, opportunities, and risk within the security implications. NATO's operational goal described in the Strategic Concept is to maintain a relevant and robust capability that can: operate globally; across the range of operations; be responsive and resilient; operate in cyber space and outer space; with an organizational structure both in the C2 domain and across all mission sets that supports mission accomplishment. The on-going SFA effort to define security implications serves as the foundation of a concerted undertaking to describe broad strategic requirements within a Future Framework for Alliance Operations (FFAO).

The FFAO is a conceptual approach to requirements development that articulates a higher level vision of how NATO should operate within a shared perspective of the future. While FFAO cannot provide all the detail necessary to realize NATO's future force it can build upon the shared perspective to advance new concepts for joint and combined operations and suggest attributes that could define the future force. To gain synergy and ensure cross domain synchronization in developing the FFAO, the futures team will assess the impact that the SFA derived security implications will have on the three core tasks as well as the Capability Hierarchy Framework (CHF). This approach will facilitate the determination of doctrine, organization, training, materiel, leadership and education, personnel, facilities, and integration (DOTMLPFI) recommendations.

The futures team defines security implications for NATO as the challenges to and opportunities for attaining the level of ambition as outlined in the Strategic Concept (SC) ... "safeguard the freedom and security of all its members..." and defined by the core tasks, and in maintaining the viability of the Alliance as a political and security organization with particular emphasis on sustaining Article 5. Security, as a condition, is the degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset, such



as a person, dwelling, community, nation, or organization. The FFAO will address these security implications by developing broad strategic requirements and their consequent military implications across a range of domains to synchronize the elements of DOTMLPFI.

Assumptions

For the purpose of this effort, FFAO will use six key assumptions in its development :

- (1) The FFAO will be a Bi-SC endorsed document;
- (2) the Alliance ends, core tasks, and Level of Ambition (LoA), per NATO 2010 Strategic Concept are ideas that will form the foundations of FFAO;
- (3) NATO Forces 2020 will be implemented and modernized with the Capability Requirements Review (CRR) 12;
- (4) NDPP remains the Alliance deliberate planning process and ACT futures work (SFA + FFAO) becomes an enduring process integrated with the Enhanced NDPP;
- (5) the Alliance remains fiscally constrained;
- (6) The future security and operating environments derived from SFA reflect the shared perspective.



Annex A: Core Tasks

This Annex describes the three Core Tasks including some specific points to stimulate discussion in the four breakout sessions when analysing the assigned Security Implications.

Collective Defence

NATO members will always assist each other against attack, in accordance with Article 5 of the Washington Treaty. That commitment remains firm and binding; NATO will deter and defend against any threat of aggression, and against emerging security challenges where they threaten the fundamental security of individual Allies or the Alliance as a whole.

Specific Points:

Deterrence: deterrence based on an appropriate mix of nuclear and conventional capabilities, remains a core element of our overall strategy. The circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote. As long as nuclear weapons exist, NATO will remain a nuclear alliance.

Visible Assurance: carry out the necessary training, exercises, contingency planning and information exchange for assuring our defence against the full range of conventional and emerging security challenges, and provide appropriate visible assurance and reinforcement for all Allies.

Ballistic Missile Defence: develop the capability to defend our populations and territories against ballistic missile attack as a core element of our collective defence, which contributes to the indivisible security of the Alliance. We will actively seek cooperation on missile defence with Russia and other Euro-Atlantic partners.

CBRN Defence: further develop NATO's capacity to defend against the threat of chemical, biological, radiological and nuclear weapons of mass destruction.

Cyber Defence: develop further our ability to prevent, detect, defend against and recover from cyber-attacks, including by using the NATO planning process to enhance and coordinate national cyber-defence capabilities, bringing all NATO bodies under centralized cyber protection, and better integrating NATO cyber awareness, warning and response with member nations.

Crisis Management

NATO has a unique and robust set of political and military capabilities to address the full spectrum of crises – before, during and after conflicts NATO will actively employ an appropriate mix of those political and military tools to help manage developing crises that



have the potential to affect Alliance security, before they escalate into conflicts; to stop on-going conflicts where they affect Alliance security; and to help consolidate stability in post-conflict situations where that contributes to Euro-Atlantic security.

Specific Points:

Syndicate 1:

Counter Terrorism (CT): offensive measures taken to neutralise terrorism before and after hostile acts are carried out. Such measures include counterforce activities justified for the defence of individuals as well as containment measures implemented by military forces or civilian organizations.

Peace Keeping (PK): operations generally undertaken in accordance with the principles of Chapter VI of the UN Charter to monitor and facilitate the implementation of a peace agreement.

Peace Enforcement (PE): operations normally take place under the principles of Chapter VII of the UN Charter. They are coercive in nature and are conducted when the consent of all Parties to the conflict has not been achieved or might be uncertain. They are designed to maintain or re-establish peace or enforce the terms specified in the mandate.

Conflict Prevention (CP): activities normally conducted in accordance with the principles of Chapter VI of the UN Charter. Activities may include: diplomatic, economic, or information initiatives; actions designed to reform a country's security sector and make it more accountable to democratic control; or deployment of forces designed to prevent or contain disputes from escalating to armed conflict.

Syndicate 2:

Consequence Management (CM): actions taken to maintain or restore essential services and manage and mitigate problems resulting from disasters and catastrophes, including natural, man-made, or terrorist incidents.

Humanitarian Assistance (HA): activities and tasks to relieve or reduce human suffering. These activities may occur in response to earthquake, flood, famine, or manmade disasters such as radioactive, biological, or chemical contamination or pandemic outbreak. They may also be necessary as a consequence of war or the flight from political, religious, or ethnic persecution. Since humanitarian activities are basically a civilian task, military engagement would principally cover functions that cannot be assured in the required amount by these organisations.

Support to Disaster Relief (DR): missions include prompt aid that can be used to alleviate the suffering of disaster victims.



Extraction Operations (EOP): operations described as missions where a NATO-led force covers or assists in the withdrawal of a UN or other military mission from a crisis region. A force committed to an extraction operation should have similar capabilities to those required by a force operating in support of NEO and should include the necessary assets for transporting the personnel to be extracted. An extraction operation is most likely to be conducted in an uncertain or hostile environment. In general, these conditions are similar to those pertaining in the previous instances of NEO.

Enforcement of Sanctions and Embargoes (ESE): ESE is designed to force a nation to obey international law or to conform to a resolution or mandate. Sanctions generally concern the denial of supplies, diplomatic, economic, and other trading privileges, and the freedom of movement of those living in the sanctions area. Sanctions may be imposed against a specific party or in the context of a NA5CRO, over a wide area embracing all parties. The military objective is to establish a barrier, allowing only non-sanctioned goods to enter or exit.

Cooperative Security

The Alliance is affected by, and can affect, political and security developments beyond its borders. The Alliance will engage actively to enhance international security, through partnership with relevant countries and other international organisations; by contributing actively to arms control, non-proliferation and disarmament; and by keeping the door to membership in the Alliance open to all European democracies that meet NATO's standards.

Specific Points:

Wide Network: the promotion of Euro-Atlantic security is best assured through a wide network of partner relationships with countries and organisations around the globe. These partnerships make a concrete and valued contribution to the success of NATO's fundamental tasks.

NATO-UN Relations: cooperation between NATO and the United Nations continues to make a substantial contribution to security in operations around the world. The Alliance aims to deepen political dialogue and practical cooperation with the UN.

NATO-EU Relations: an active and effective European Union contributes to the overall security of the Euro-Atlantic area. Therefore the EU is a unique and essential partner for NATO.

NATO-Russia Relations: NATO-Russia cooperation is of strategic importance as it contributes to creating a common space of peace, stability and security.

Defence against Terrorism: enhance the capacity to detect and defend against international terrorism, including through enhanced analysis of the threat, more consultations with our partners, and the development of appropriate military capabilities, including to help train local forces to fight terrorism themselves.