Forging the Future
Leading NATO Military Transformation

Framework for Future Alliance Operations Workshop #2

Read-Ahead

10-11 July, 2013
NATO School, Oberammergau, Germany

Organized by
Allied Command Transformation, Norfolk

In partnership with
NATO School, Oberammergau

FFAO Workshop #2 Task, Purpose and Outcome

Tasks: (1) The ACT Strategic Analysis Branch will gather a broad representation of Alliance Nations, partners, Centres of Excellence, and defence experts from other governmental and non-governmental organizations including academia and industry to further develop NATO's Futures Work. (2) In a plenary session, this broadly constructed and diverse team will organize the 15 trends, described in the Strategic Foresight Analysis (SFA), into three groups of interrelated trends. (3) The team will then divide into three syndicates. Each syndicate will analyse one trend group by comparing individual trends to the 34 SFA defence and security implications. (4) Each syndicate will write a series of short narrative paragraphs describing the relationships between the trends and defence and security implications and then present a summary to the group in the final session.

Purpose: The participants in this workshop will analyse SFA findings to develop a conceptual model that conveys an understanding of the Future Security Environment. This conceptual model will serve as the foundation for the Framework for Future Alliance Operations (FFAO).

Outcome: The participants will write a series of short narrative paragraphs describing the relationships between the trends and defence and security implications.

"In order to carry out the full range of NATO missions as effectively and efficiently as possible, Allies will engage in a continuous process of reform, modernisation and transformation." 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 both the persistent methodology to examine the future security 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) is now conducting futures work in coordination and cooperation with Allied Command Operations (ACO), the International Staff (IS), and the International Military Staff (IMS). 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), was 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 was to develop a shared NATO perspective of a future that will be different from today. To derive the shared perspective, SFA analysed trends organized around central themes or categories, and then developed an initial set of 34 defence and security implications which may be relevant to NATO and to defence planning.

The next step in our futures work is the Framework for 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. During FFAO Workshop #2 we will build on the work begun in SFA. Starting with our plenary session, our broadly constructed and diverse team will organize the 15 trends, described in the SFA, into three groups of interrelated trends. Then the team will divide into three syndicates. Each syndicate will analyse one trend group by comparing individual trends to the 34 SFA defence and security implications. Finally, the syndicates will write a series of short narrative paragraphs describing the relationships between the trends and defence and security implications.

> *Here is an example of a narrative paragraph describing a relationship between Urbanisation and Non-State Actors: the rise of groups with the power to influence or cause change includes a growing list of non-state actors who tend to coalesce within cities. This empowerment of sub-state organizations causes diffusion, consolidation, and diversification of state power. Moreover, cities are directly connected to this redistribution and refocusing of governmental power.*

For example, cities themselves can behave as non-state actors while also attracting a wide variety of other sub-state actors. Corporations; non-profit organizations; political groups; special interest groups; criminal organizations; clubs; cultural, ethnic, and religious groups; universities; industry; and super empowered individuals are all attracted to urban areas. These non-state actors work within the framework of cities using the infrastructure of urbanized areas to create a complex pulsating diffusion and aggregation of governance to surge power in places and times where required to maximize efficiency and effectiveness of governance and to emphasize the interests of specific groups.

In the next two workshops, we plan to continue building the FFAO by viewing the model of the future security environment through the lens of NATO's three core tasks of Collective Defence, Cooperative Security, and Crisis Management to develop Broad Strategic Insights (BSI). These BSIs will then be used to develop military and capability implications that will be the foundation for the FFAO.

EXECUTIVE SUMMARY (18 June Draft)

1. In response to Military Committee (MC) tasking regarding NATO's Connected Forces Initiative (CFI), Allied Command Transformation (ACT) initiated ongoing Long-Term Military Transformation (LTMT) futures work. **Strategic Foresight Analysis (SFA)** is the initial component of this endeavour that will serve as the foundation for the development of the follow-on Framework for Future Alliance Operations (FFAO), an analysis of how the Alliance might change to anticipate a long-term future different from today. Both will support and inform the NATO Defence Planning Process (NDPP) and other future focussed processes. SFA is based on recent national and international studies that address the 2030-2050 timeframe, previous ACT futures analyses and the results of four separate ACT-led workshops.

2. SFA identifies trends that will shape the future strategic context and, from these trends, derives defence and security implications for the Alliance out to 2030 and beyond. It is acknowledged that these implications are derived from specific trends under a single theme. However, any number of multiple accelerating trends could interact in unforeseen ways further increasing complexity with unknown consequences and implications not listed here. The report concludes that the future is neither completely predictable nor pre-determined. It does, however, deduce that the period of transition which humanity is currently experiencing will become even more complex and uncertain, presenting threats as well as opportunities fuelled by an accelerating rate of social and technological change combined with the pervasive effects of globalisation. It is important that the Alliance continues to observe the global environment to build a common understanding of trends that will inform its continuing transformation efforts.

3. SFA identifies trends in five broad themes: Political, Human, Technology, Economics and Resources, and Environment.

4. At the political level, global power shifts will continue to have significant effects.

- Developing nations will exert increasing global influence. This shift in power may cause instability.
- The increased relevance of certain regions may support the pursuit of new types of partnerships and associations for NATO.
- NATO could be affected by crises farther from Alliance territory, where non-state actors may play a larger role and Nations' interests might not always align.

5. The future is likely to be characterised by changing demographics, urbanisation, human networks and fractured identities.

- Most NATO nations will experience overall ageing, leading to a shrinking military-able population. In developing nations, youth bulges could lead to potential challenges.
- Urbanisation will increase the likelihood that the Alliance may need to conduct combat or security operations in condensed urban environments.
- Human networks and demands for transparency will bring new challenges and opportunities for NATO.
- Changes in the relationship of individuals to the state could present governance challenges and create the potential for social and political disruption.

6. Accelerating technological change will contribute to how the future is shaped.

- Technological innovation has the potential to provide significant global benefits, but also creates a greater likelihood of adverse consequences.
- Potential adversaries will have greater access to innovative science and technology and will continue to attempt to obtain Weapons of Mass Destruction / Effect (WMD/E) information or material.
- The Alliance must continue to anticipate technological advances in order to maintain its technological edge.
- There will be increased potential for cyber-attacks against Alliance networks or military systems**.**

- The ubiquity of information and social media will present both challenges and opportunities for NATO's strategic communications.

7. Globalisation and increasing resource scarcity will directly influence international security.

- Global markets, financial institutions and national economies will become even more interdependent thus increasing the risk of a cascading global crisis.
- International flows of goods, people, information, services, ideas and money, will be the crucial arteries of a globalised world. Disrupting the flow in one of them will have far-reaching consequences for the whole body.
- The competition for scarce raw materials, food, water, and energy resources, inside or outside traditional Alliance regions, will have global consequences.
- The potential for declining defence expenditures and slow economic growth would threaten the Alliance's full spectrum of military capabilities.

8. Environmental changes will have an impact across many global issues**.**

- Climate change will have positive effects in some regions, while other areas will suffer from its negative impacts.
- Other environmental threats like air and water pollution, deforestation, and the spread of disease may contribute to insecurity and instability.
- Natural and man-made disasters will continue to lead to the requirement for humanitarian assistance or disaster relief operations.

9. The analysis acknowledges that some identified trends will have divergent impacts on the Alliance or individual Nations. However, Nations should have a common understanding of those trends that will likely affect the Alliance's core tasks. This requires Nations to share their perspectives of the future and maintain an active role in the continued identification of those defence and security implications which may entail a consensual response. ACT intends that SFA will be a living document that will be updated regularly and synchronised with the NDPP timetable. SFA is designed to be a

persistent, collaborative, transparent and iterative effort which encourages meaningful discourse and an open exchange of ideas about the collective future of the Alliance.

APPENDIX B

SUMMARY OF THEMES, TRENDS, IMPLICATIONS

5 Themes, 15 Trends, and 34 Implications for NATO

POLITICAL THEME

1. **Shift of Global Power.** Rebalance of power from the west to other regions will present political and economic challenges to NATO members.
    a. Re-balancing of global military power.
    b. NATO's relevance challenged.

2 **Shifting Political Structures.** The transition of autocratic / theocratic regimes towards democracy will continue.
    a. Instability along NATO's borders.

3. **Polycentric World.** The world is becoming increasingly interconnected and polycentric.
    a. Fragmentation of alliances and challenges to international law.
    b. Increased co-operation opportunities.
    c. Increased influence of non-state actors.
    d. Increased reliance on private actors for security.
    e. Multiple threat perceptions.

HUMAN THEME

4. **Changing Demographics.** Future demographics will be driven by diverse effects.

a. Decreased human capital in Western nations.

b. Youth bulge in developing nations.

5. **Urbanisation.** Cities will contain 65% of the world's population by 2040, and 95% of this urban population growth will occur within developing nations' mega-cities.

a. Increased potential for NATO involvement in urban areas.

6. **Human Networks / Transparency.** Human networks are expanding at an exponential rate with many varying effects.

a. Greater need to understand human networks.

b. Heightened transparency creates social challenges.

c. Increased popular influence on decision making.

d. Increased economic and security strain due to a potential pandemic.

7. **Fractured Identities.** Several contributing factors may lead to a fracturing of national identity.

a. Increased instability due to the fracturing of national identity.

b. Extreme ideologies lead to aggression.

TECHNOLOGY THEME

8. **Technology Accelerates Change.** The accelerating cycles of exploration, discovery and exploitation of technologies along with the innovative fusion of existing, emerging and new technologies will combine to bring about change rapidly in the future.

a. Divergent use of disruptive technologies, including countermeasures.

b. Technological change tests NATO's adaptability.

9. **Increased Access to Technology.** Commercial research and technology has begun to outpace that of governments in the development of new technologies.

a. Inability to prevent the spread of potentially dangerous technology.

b. Continued WMD/E proliferation in unstable global regions.

c. Decreased commitment of a growing number of states to global disarmament and arms control.

10. **Centrality of Computer Networks.** A globally connected and networked world creates a universal availability of information.

a. Increased potential for cyber-intrusion, espionage and attacks against Alliance networks or military systems.

b. Increased importance of electronic tools and resources for strategic communications and influence.

ECONOMICS / RESOURCES THEME

11. **Globalisation of Financial Resources.** The financial networks and communication systems that manage the world's critical resources are increasingly intertwined.

a. Vulnerability of the global financial network.

b. Any future global economic crisis affects Alliance cohesion.

12. **Increased Resource Scarcity.** Nations need increasing amounts of energy and raw materials to sustain growth and maintain an advantage in the globalised economy.

a. Increased potential for resource-driven crises.

b. Emergence of new areas of geopolitical competition for resources.

13. **Decreasing Defence Expenditures.** Governments faced with slow or non-existent growth, rising unemployment and increasing debt burdens will continue to have many competing priorities.

a. Potential reduction of the Alliance's full spectrum capabilities.

b. Degradation of the Defence Industrial Base for Alliance members.

ENVIRONMENT THEME

14. **Environmental / Climate Change.** Global environmental change and its impacts are becoming readily apparent and are projected to increase in the future.

a. Increased humanitarian assistance and disaster relief operations due to extreme weather events.

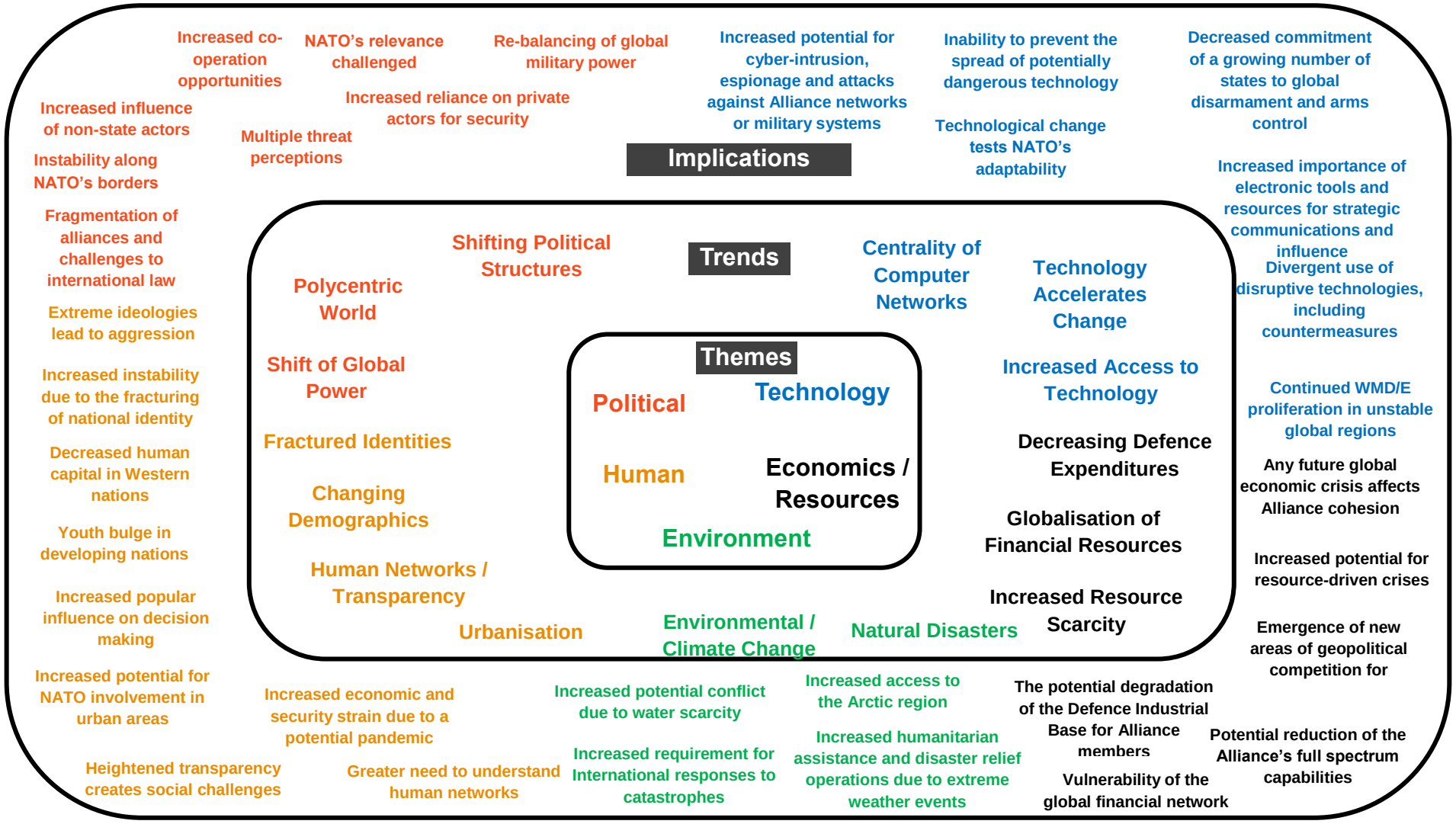
b. Increased access to the Arctic region.

c. Increased potential conflict due to water scarcity.

15. **Natural Disasters.** The effects of natural disasters will become more devastating.

a. The increased requirement for international responses to catastrophes.

NATO STRATEGIC FORESIGHT ANALYSIS



Sharing perspectives of an increasingly complex and uncertain world.