

Strategy Research Project International Fellow

The Third Offset Strategy – Sidelineing Smaller Allies?

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Abstract

The US is pursuing a Third Offset Strategy to maintain a leading edge in the execution of warfare. What effects will this have on the smaller NATO member's defense policy and options for force development, continued interoperability with US forces and maintaining relevance in NATO or US-led coalition operations? Today threats posed by potential antagonists like China and Russia, but also the spread of high tech, low cost weapon systems in general, drive the need for a Third Offset strategy. The Third Offset requires new technology and new warfighting concepts. Historically new military technology has been expensive to procure and implement for smaller allies. The focus on new and innovative concepts presents opportunities for smaller allies. The small NATO member state Denmark will be used as a case to validate the thesis that smaller NATO countries should focus their defense investments on fundamental warfighting capabilities. These warfighting capabilities must be able to connect to the future network supporting the Third Offset Strategy. The USA must take steps to mitigate risks to interoperability within NATO caused by the Third Offset Strategy.

The Third Offset Strategy – Sidelining Smaller Allies?

The final targets in any future conflict will be men. Even the enemy soldier pressing the pushbutton of a future missile can be killed by a bullet!

—Lieutenant Colonel Robert B. Rigg¹

The United States (US) is pursuing a Third Offset Strategy to maintain a leading edge in the execution of warfare.² From the perspective of a small NATO ally, the US quest for this leading edge begs a number of interrelated questions. How will the Third Offset Strategy affect the future character of warfare, US military strategy, warfighting concepts and force development? And what are the subsequent effects on the smaller NATO allies' defense policy and options for force development, continued interoperability with US forces and consequently maintaining relevance in NATO or US-led coalition operations?

The two previous offset strategies were about countering one adversary's, the Soviet Union's, superiority in conventional forces. The First Offset Strategy was the "new look," its defining component was the miniaturization of nuclear weapons. Precision guided munitions, sensor network, the Global Positioning System and stealth made up the main technological parts of the Second Offset Strategy. These technological advances focused on defeating a numerical superior enemy, and on a specific threat, the Soviet Union. Today threats posed by potential antagonists like China and Russia, and the spread of high tech, low cost weapon systems in general, drive the need for a Third Offset strategy.

The Third Offset will entail investments in new technology and development of new warfighting concepts.³ Historically new military technology has been expensive to procure and implement, which can make it difficult for smaller allies to keep up. As an

example, Danish F-16 fighter aircraft were only upgraded to deliver precision guided munitions after the Kosovo conflict in 1999. Night vision equipment, Global Positioning System etc. was widely introduced in the Danish Army 5 years after the first Gulf War in 1991, in part because of operational requirements by NATO operations in the Balkans.

Like the Second Offset Strategy, the Third Offset Strategy will also present challenges for smaller NATO alliance members. Given the resources allocated to defense spending in smaller NATO countries, implementing all aspects of the Third Offset Strategy will probably not be possible, even if the 2% of GDP NATO ambition is realized. On the other hand, the focus on involving new and innovative concepts, designs and technologies, presents opportunities for smaller allies, with a limited defense industrial base, as well as civilian firms not accustomed to investing in the defense business sector. This element has the potential to make investing in third offset technologies possible for smaller NATO countries.

Smaller NATO countries should focus their defense materiel spending and technology investments on fundamental warfighting capabilities, with an emphasis on high intensity warfighting. The small NATO member state Denmark will be used as case to validate this thesis. Analyzing Denmark's strategic security environment, military challenges and options, opportunities and risks presented by the Third Offset Strategy, will form the basis for an approach for Denmark to remain a relevant military partner in NATO and coalition operations.

The Third Offset Strategy is a recent conception, still under development, and comprehensive research in the field is fairly limited. Various sources have informed this paper, from official government policy to journal articles.⁴ For the purpose of this paper,

based on the sources dealing with the subject, the purpose of an offset strategy is defined as being about gaining a military advantage, which provides strategic overmatch.⁵

To analyze the strategic environment, the military challenges and inform a Danish approach to the Third Offset Strategy, the analysis is structured around a revised operational design model. The model develops options for an approach, based on an analysis of the strategic environment and military challenges. Inspired by the US Army War College strategy formulation model, the analysis will then identify; feasibility, acceptability and suitability as well as risks and opportunities pertaining to the different options. The findings will be put into perspective with respect to the consequence of the Third Offset Strategy for other smaller NATO countries.

Changes in the Strategic Security Environment

Both China and Russia revanchists' stance challenge the current rules based world order worldwide, but with a visible emphasis on Asia and Europe. Both countries have ambitions of regional super power status, giving them greater influence on the world stage.⁶ They do so with the diplomatic, informational, military and economic instruments of national power, utilizing them in varying degrees.

China is a rising economic world power. China uses its economic power to support its worldwide diplomatic and informational influence. China's military is wielding its power regionally in disputed areas, and poses a credible threat to many of its neighbors. In the region, only India has the military power to deter China, in part because of its status as a nuclear power. India's deterrence of China is paradoxically based on the tenets of the First Offset Strategy, and its focus on nuclear deterrence. China currently mostly projects military power globally in support of UN operations.

Russia on the other hand is in an economic decline. Despite of the internal economic situation, Russia still has economic leverage over some countries in Eastern Europe and on the Balkans.⁷ Russia uses all its instruments of national power, including use, or the threat of use, of military power, to influence the situation in the “near abroad,” to its advantage. Russia uses its vast diplomatic network to support its information campaign, as well as maintaining, rebuilding or building new economic or military ties with nations having similar interests. The revitalized economic and military cooperation between Russia and China is an example of this approach.⁸

Both nations have launched extensive military modernization programs as one part of their strategies to counter western, and especially US, influence.⁹ As part of their long-term modernization programs, they have developed the capacity to counter US military technological overmatch, or even reached near parity in specific areas.¹⁰ Both countries make some of their advanced weapon systems available for export and technology transfer.¹¹ This can potentially proliferate the threat to US overmatch and military dominance worldwide, which in turn threatens the security and interests of the US and its allies.

The Impact of a Changing World Order on US Security Policy

The US continues to develop and field cutting edge weaponry and materiel to its forces. Future force development has been given a lower priority during the “Long Wars” since 9/11.¹² In the current security environment, readiness and operations trumps modernization. This is the strategic imperative behind the Third Offset Strategy. The modernization risk since 9/11 led the US into the same trap as the Vietnam War did 50 years earlier.

Contrary to the earlier predominance of one enemy during the Cold War, the US now faces multiple competitors, antagonists or enemies. As pointed out, predominantly China and Russia, are contesting US world leadership and the liberal rules based world order.¹³ As part of their military modernization programs and bilateral arms trade, China and Russia have started a process towards a more integrated military research and development cooperation in specific areas, to hedge against American military dominance. On top of this smaller nations like North Korea and Iran also threaten American allies. In the case of North Korea, there is a potential for a threat to the American homeland by its strategic missile program. As technology to counter US military overmatch becomes more accessible, non-state actors could also pose a greater threat. This combination of competitors and threats is known as the “4+1.”¹⁴ This led then Secretary of Defense Chuck Hagel to launch the Defense Innovation Initiative in 2014. The initiative has been rebranded the Third Offset Strategy.¹⁵ As reason for launching the initiative the then Secretary of Defense stated the following in his directive.

We are entering an era where American dominance in key warfighting domains is eroding, and we must find new and creative ways to sustain, and in some areas expand, our advantages even as we deal with more limited resources.

While we have been engaged in two large land mass wars over the last thirteen years, potential adversaries have been modernizing their militaries, developing and proliferating disruptive capabilities across the spectrum of conflict. This represents a clear and growing challenge to our military power.¹⁶

Amongst others, then Secretary of Defense, Chuck Hagel identified four tenets. The first aspect was leadership development. Second focus was to identify and develop breakthrough technologies to advance U.S. military power. Thirdly war gaming would

develop and test ways of achieving strategic objectives and create a clear vision about the future security environment. Fourth new operational concepts would employ resources to greater strategic effect in more innovative ways.¹⁷ Basically this defines the Third Offset Strategy as being about more than technology, it also involves rethinking leader development, war gaming and development of new concepts.

Facing powerful and advanced antagonists has forced the US to ramp up its research and development efforts, with the purpose of creating an asymmetrical advantage. The purpose is to deter aggression against US security and interests while also protecting its allies. In essence the Third Offset Strategy is first and foremost about deterring antagonists without relying on the nuclear option. The Third Offset Strategy can hence be characterized as a way for the US to maintain its credibility and ability to influence world affairs.

Strategic Consequences of the Changing Security Environment for Denmark

In Europe, US allies find Russia's aggressive behavior is drastically changing the regional strategic and security environment.¹⁸ As recommended by NATO, Denmark had a sole focus on expeditionary operations on the rims of or outside of Europe for nearly 15 years. Few resources were allocated to securing territorial integrity, sovereignty and the obligatory defense support to civilian authorities. This is now the past, with the Russian actions in Ukraine a new security reality has emerged. Since late 2014 Denmark's armed forces has been using an expeditionary focused force to support neighboring countries in the Baltic region in deterring Russian aggression, protecting the territorial integrity, and support for civilian authorities in the Arctic and European Denmark. This has been done, while continuing to deploy forces outside of Europe on operations in Afghanistan, at the Horn of Africa, in Iraq and Syria and across

North Africa.¹⁹ This has been accomplished while suffering a 12% cut to the defense budget from 2013 to 2017, which has stretched the force to its maximum.²⁰

To understand why adopting changes brought about by the Third Offset Strategy affects Denmark's national interests, it is necessary to frame how the current and future security environment impacts Denmark.

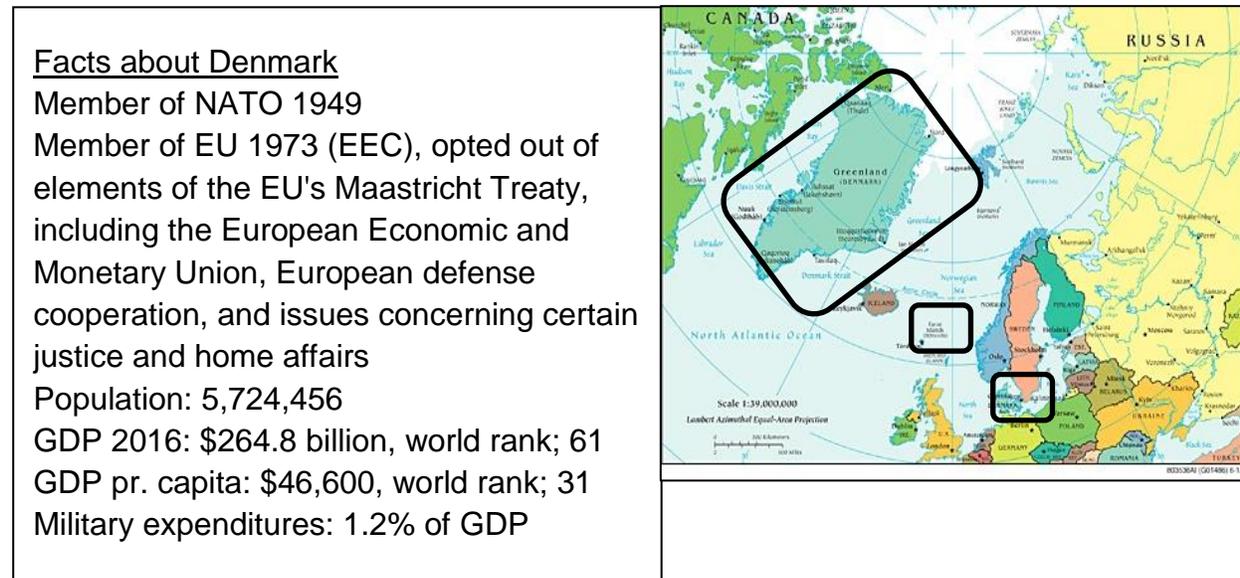


Figure 1. The Danish Realm²¹

As a small nation Denmark has limited means to impact the security environment on its own. Now and in the future Denmark relies on alliances and the support of partners to protect and promote its interests.²² Similar to the rest of the western world, Denmark faces a host of challenges which can have an effect on important interests, now and in the foreseeable future. These include; regional instability, cybercrime and – espionage, proliferation of WMD, terrorism, migration and climate change. Few of these single challenges reach a threshold where they threaten Denmark's existence and vital national security interests or pose the probability of coercion by other states.²³ A potential security threat to these vital interests is currently only posed by one power,

Russia.²⁴ Unlike what other European nations are facing, the potential for tensions or even conflicts with Russia are present in two widely dispersed and distinct geographic locations, Northern Europe and the Arctic.²⁵

In Northern Europe and especially the Baltic Sea area, tensions are high. The three Baltic States and Poland feel pressured by Russia.²⁶ Russian aggression will most likely not be in the form of a conventional attack. It is likely to be in the form of what is popularly called “Gray zone conflict” in the US, and “Hybrid warfare” in Europe. Denmark still dominates the entrance to the Baltic Sea, a Russian threat to Danish sovereignty cannot be ruled out. Conflict and coercion can return as a political instrument in Europe. Being on the rim of what Russia characterizes as the “near abroad,” tensions between Russian and Danish interests cannot be ruled out.

The other area where Danish and Russian interests overlap is the Arctic. The Arctic has so far not been an area of tension and conflict. The Arctic nations have a shared understanding of a non-militarization, as well as resolution of disputes based on international norms and institutions.²⁷ On the other hand Russia’s military buildup and actions in the region cannot be ignored.²⁸ Russia, Denmark and to a lesser degree Canada claim the same parts of the North Pole seabed. Potentially, Russia will ignore international rulings if they run counter to their interests. This creates the possibility of tensions and conflict in the region.²⁹

So far Denmark has no intent of building up military forces to counter Russia alone in the Arctic. Denmark will have to rely on the mutual interests of the other three Arctic NATO nations (USA, Canada and Norway) in countering an eventual Russian disregard for the rulings of the UN Commission on the Limits of the Continental Shelf.

Denmark cannot count on the support of other nations if it does not invest the necessary resources to assert control over Danish territory.³⁰ To show resolve and protect vital interests, Danish armed forces will need a continued presence in the Arctic, invest in capabilities to gain situational air, ground and maritime awareness, and be able to reinforce that presence if necessary.³¹

For Denmark, protecting vital national interests is only possible in an alliance and together with likeminded democratic nations. The cornerstone of Danish security policy is NATO.³² Denmark has opted out of defense and security cooperation agreement in the EU. Current nationalist and populist trends in the US and Europe could undermine the cohesion of NATO and EU. In this case Denmark would have to revise its current alliances, and orient towards alliance partners, who have the necessary strength and international leverage to support Denmark in retaining national sovereignty. Consequently it is vital for Denmark to contribute to the cohesion of NATO and continued strong Atlantic ties.

In recent history Denmark has pursued this interest by contributing to NATO and US led combat, counterinsurgency stability and peacekeeping operations in Europe, the Middle East and North Africa. The last indication of this approach, is Denmark's commitment to show resolve in the fight against ISIL, and support for the Baltic States, by regular deployment of forces to these operations. In order to support the continued cohesion of NATO, Denmark must be able to participate in collective defense in NATO, and NATO or coalition expeditionary operations. This has implications for the future force structure. A sole focus on either collective defense or expeditionary operations is not viable.

The pressure to increase defense spending to 2% of GDP creates internal political tensions in Denmark.³³ Prioritizing national security is not a normal tendency in Danish politics. Until now the 4 to 5 year Danish defense agreements typically were nested in a settlement between most parties centered on the political middle of the parliament. Past and current Danish governments have affirmed Denmark's commitment to NATO's 2% ambition. The current left wing opposition parties are skeptical of the need to spend 2% of GDP, on defense.³⁴ A consensus is forming among major parties about the need for investment in ballistic missile defense capabilities and a rebuilding of the navy's anti-subsurface warfare capability.³⁵ Some parties do not see the need for ballistic missile defense capabilities, to counter Russia, but a nuclear armed Iran.³⁶ A full support for a ballistic missile defense capability, means concessions in other areas, which might benefit the army.³⁷ The political arena for the negotiations of a future defense agreement are not clearly defined, and how it will affect Danish Defense ability to maintain interoperability with US forces implementing the Third Offset Strategy is currently unclear.

Acknowledging this uncertainty and the fact that means are not infinite, options for future force development and structure must be constructed around two probable outcomes of the political negotiations for the next defense agreement (2018-2023). If current resourcing is maintained, the procurement of F-35 will have a negative impact on the rest of the force structure. One option will be raising the defense budget just enough to mitigate this impact on the rest of the force structure. Such a lack of will, puts Denmark at odds with the US, and UK, both significant strategic partners for almost two decades. It would in reality signal a reorientation away from what in Denmark is labeled

as an activist foreign and security policy. Denmark would by such an action identify itself as reorienting towards the collective defense in NATO. In reality, the scarcely resourced Danish Defense Forces would barely have the capacity to fulfill the force goals set out in NATO's defense planning guidance, for that role. Taking this approach, Denmark risks being politically sidelined in NATO and the EU, with no major countries as close allies.

The other outcome would be a substantial raise to the defense budget, enabling development and modernization of capabilities and force structure across the force. The focus in this option would be on fulfilling NATO's defense planning force goal and enhancing the overall capacity to engage in high end warfighting in all domains. This would maintain Denmark's credibility within NATO and the relationship with two important allies and partners, the US and UK.

From the policy statements of the current government after the latest meeting of NATO defense ministers, a substantial raise in the defense budget seems likely.³⁸ No numbers have so far been publicized about how big such a budget increase would be. Despite an eventual political will to put more resources into defense, the force structure will most probably still be too small to accommodate all political priorities for employment of the force. Consequently politicians will still have to prioritize how to apply the available military means based on the situation. New approaches must be considered to make up for such shortfalls.

Paradoxically the Third Offset Strategy may pose an opportunity to make up for shortfalls in Danish Defense capabilities. On the other side, investing in these new capabilities may force a prioritization to purge other more traditional military capabilities. One of Denmark's methods for preserving alliance cohesion and the transatlantic link is

by participating in expeditionary operations, either US or NATO led. As a minimum, current and future Danish capabilities must be interoperable with current and future US capabilities, as well as major NATO partners like the UK, Germany and to some extent France.

Consequences of an Uncertain Future

US dominance is under pressure worldwide. This presents challenges and creates uncertainty for a small nation like Denmark, which hitherto has sought refuge in a rules based world order and a strong transatlantic link. The impacts of the current worldwide uncertainty and security situation creates internal and external dilemmas for Denmark.

First, the pressure to increase defense spending to 2% of GDP creates internal political tensions in Denmark.³⁹ Secondly the insecurity brought about by the perceptions of the new US administrations wavering support to international institutions, laws and norms creates insecurity, about how increased defense spending and participating in NATO and US led coalition operations will benefit Denmark. Emerging threats and insecurity about US commitment to NATO, does not prepare the ground for a status quo or decline in Danish defense spending. The external and international insecurity may prove to be the catalyst for higher defense spending in the coming Danish defense agreement.

Due to resource constraints the Third Offset Strategy risks putting Denmark in a situation where it is forced to focus solely on collective defense, at the expense of expeditionary operations, at least in a coalition with US lead. This could happen if Danish Defense is not given access to, or has the resources to acquire, technology needed to maintain interoperability with US forces. The risk therefore exists that

Denmark's vital interest in supporting NATO's cohesion is endangered by the Third Offset Strategy. This risk could in part be mitigated if the US involved allies and their relevant industries in future research and development of the Third Offset Strategy.

The Military Challenge

Having defined an environment where China and Russia are reaching near military and technological equality in with the US in vital areas, how will the US approach these challenges and what are the effects on allies like Denmark. How will small nations like Denmark cope with these effects and what opportunities do they present. The following paragraphs will identify implications for defense policy, force structure and capability development in Denmark, based on the comparable developments in the US.

The Challenge to US Military Dominance

Three main drivers threatens US military dominance. First, US forces are mostly CONUS based and will have to deploy to a theater of operations. In doing so, they face the possibility of having to fight to get a foothold in a theater of operations where an opponent has significant anti-access/area denial capabilities. This brings forth the second driver. Russia, and especially China, have developed their battlefield networks, with connected sensor and missile systems to a degree of near parity. The third and perhaps most worrisome driver is the ability developed by Russia and China to conduct a range of counter network operations. These counter network operations range from traditional electronic warfare capabilities coupled with cyber operations to kinetic capabilities, which can degrade or destroy the physical infrastructure of battlefield networks.⁴⁰ All these developments threaten the US strategic autonomy to project its military force to deter or respond to crises around the world.

The Third Offset Strategy is as aforementioned designed to reestablish US ability to have a credible deterrence option, apart from nuclear deterrence, by creating an asymmetrical advantage in medium and high intensity warfare. As defined in the previous paragraph, the elements of the strategy are rethinking leader development, research and development to identify breakthrough technology, war gaming to predict the future operating environment, determine future threats and develop and test new concepts. The original directive also mentions streamlining Defense internal business models, which might be an area where the business models of smaller and efficient allies might serve as best practice examples for cutting overhead costs. The issue is not deemed to be of vital importance for this analysis.

A critical component to the strategy is missing. The USA is not, and will probably not, be fighting wars alone.⁴¹ The US must involve trusted allies and partners in this process to ensure that future coalitions present a unified deterrent and if necessary a coherent fighting force.

The involvement of allies has been addressed later, by Deputy Secretary of Defense Robert Work in speech delivered in January 2015. The discourse addressed; the need for collaborative planning, how each ally has key competencies and the need not to duplicate. The important part among allies is to identify leaders in specific areas of relevant technology is also addressed. Another topic touched upon in the speech is the potential for specialization amongst alliance members.⁴² How to collaborate, identify technology leaders or how specialization should take place has not been specified in detail, in public. Given these ideas it seems relevant to identify opportunities to engage for Danish Defense and Danish industry.

The Vice Chairman of the Joint Staff described the Third Offset Strategy as a journey with no clearly defined end point. But most journeys have a starting point. To establish this starting point and how Denmark best joins the journey, the following paragraphs will discuss the overall strategy and each of its elements. This will identify opportunities and risks associated with the elements of the Third Offset Strategy. These steps will assist in identifying further military challenges for Denmark, and how to develop options to face these challenges.

In setting the scene it is relevant to analyze the principles behind some of the more conceptual discussions about the strategy. Deputy Secretary of Defense Robert Work has iterated that the focus of the Third Offset Strategy is the operational level of warfare. The normal role associated with the operational level of warfare, is one of bridging the gap between strategic level objectives, through campaign planning and execution, and setting the conditions for the tactical battle. Taken literally, the Deputy Secretary's statement would have a profound effect on the future character of warfare. Normally tactical units and capabilities will achieve effects that supports the accomplishment of the operational military objectives. As such units and capabilities have been considered tactical assets, but this new approach would designate certain capabilities associated with the Third Offset Strategy as operational level of warfare capabilities. Hitherto the operational level of warfare has been the domain of the Joint Task Force headquarter headquarters or others, with assigned tactical components.

This vision by the Deputy Secretary is important, because it points to a new organizational and operational construct, where technology enabled capabilities are centralized and employed by the operational level, through a direct "sensor to shooter"

link without engaging multiple levels of tactical headquarters. Eliminating multiple levels of tactical headquarters and control mechanisms will make the decision/action cycle faster and more agile. Achieving effects at the operational level, supports the tactical battle, and this is an interesting prospect for the future of warfighting in the world of the Third Offset Strategy.

A new concept for future warfare and proposed technological priorities was identified, in a paper titled *Toward a New Offset Strategy* from 2014, by former Under Secretary of Navy, Robert Martinage.⁴³ Robert Martinage analyzes how the Third Offset Strategy could impact the way the US creates deterrence (by asymmetrical punishment) and offsets an adversaries anti-access/area denial capabilities.⁴⁴ He draws upon reflections about the second offset to identify the implications of the third offset. In doing so he focuses solely on the main technological developments of the second offset, without acknowledging the concurrent development of the US Army's "Big Five." The totality of the force structure, doctrine and technology introduced in this period, amounts to a complex system. It could be argued that a major flaw in the use of the second offset as a vantage point is lack of recognition of the totality of the system, including the Air Land Battle doctrine and NATO's subsequent Follow on Forces Attack. In essence the analysis concludes that priorities should be given to unmanned and autonomous aerial and underwater capabilities knitted together through a Global Surveillance and Strike network. The resources needed would be found by cutting down on the number of more conventional capabilities, including ground forces. This would deter enemies from attacking US interests and give US the capability to deny an adversaries anti-access/area denial capability. What the analysis does not address is the so what? If the

adversary is not deterred and what happens once his anti-access/ area denial capabilities have been defeated.

Few, and only weak, countries have ever been bombed into submission, and no evidence has so far been put forth, that a combination of precision strike from the maritime and air domain will accomplish this. Even though there is much substance in the concepts described in the analysis, they still need to be put into the context of the overall operational environment and the threat, which is not solely anti-access/area denial capabilities, but also other forces fighting in all five domains. No doubt a more conventional tactical joint force, tied into the proposed Global Surveillance and Strike network would have considerably advantages over an enemy, who is attacked simultaneously in all domains.

The conclusion is that while the Third Offset as envisioned will give definite advantages for the operational level of war, it will not do away with the tactical level of war, where kinetic battles are fought by humans and their machines in the Air, Land, Maritime and Space domain. The implication is that conventional tactical forces must also undergo a technological, conceptual and organizational development, which enables them to operate in conjunction with and at the pace of the operational level surveillance and strike forces. The implication for the development of Danish capabilities, is that they must follow this technological, organizational and conceptual development to remain a relevant partner for US forces. The key issues for continued interoperability are; interconnectedness, data and information sharing, resulting in shared situational awareness and understanding.

In order for Danish planners to understand the development of US forces and concepts under the Third Offset Strategy it is important to observe, and if possible partake in, relevant experimentation and war gaming sessions. This requires the US to open the events for allies' participation and integration. On the other hand allies should also recognize the importance of being involved, and allocate the necessary resources to play a part in the future processes surrounding the Third Offset Strategy. If this is not possible, releasable results should be shared with allies in order to support their force development, and ensure alignment in this important area.

An important area of the Third Offset Strategy is the integration of breakthrough technology. The five key technologies which are specifically relevant have been defined as Learning machines; Human-machine collaboration using advanced computers and visualization to help people make faster, better and more relevant decisions; assisted human operations, which means plugging every pilot, soldier, sailor and Marine into the battle network; human-machine combat teaming, creating new ways for manned and unmanned platforms to operate; and network-enabled autonomous weapons, all connected on a learning command, control, communications and intelligence network.⁴⁵ All these new technologies points toward one important technological capability, the ability to connect to the network in order to transmit and receive data. Even if Danish forces do not have the resources to invest in the other new capabilities like advanced robotics and super computers, they will still need to feed data to the network, and apply information received from the network, in multinational operations. Currently the Danish air force is well integrated into existing air force network architecture based on operational deployments over the last decade. The Danish army participates in

interoperability exercises with the US Army, to test and verify interoperability.

Interoperability between Danish and US armies, and multiple allies, will in the near term be supported by the US Army investment in a new mission command system that is based on a Danish system.⁴⁶ The Danish Navy is currently reinvigorating and extending its interoperability capabilities vis a vis the US Navy, as one of its Frigates is part of a US Carrier Strike Group.⁴⁷ Even though they are domains of principal interest, the cyber and space domain will not be discussed further, due to the classification level of this paper. An acceleration of US network capabilities not shared with allies may run the risk of damaging the current level of interoperability between US and Danish forces.

In the technology arena the Danish defense industry will have an opportunity to contribute with new and innovative technology. Examples of current high tech contributions from Danish companies to US defense technology projects is the aforementioned mission command system from Systematic. The Danish company, Terma, delivers parts to the F-35 program and other programs in the air domain.⁴⁸ Another contributor to high tech defense solutions is the radar producer Weibel.⁴⁹ In many ways even the small Danish defense industry is contributing to US capabilities. To harvest the full potential of the technological goals of the Third Offset Strategy, the US should reach out to and involve the defense and high tech industry of its allies, who are able to contribute with innovative approaches and skills.

The last tenet of the Third Offset strategy is human capital and leadership development. Leadership development in defense forces is based on different military cultures. Leadership development at the lower levels are normally a national responsibility. The US should continue to support leadership development among allies,

by continuing to offer access to its higher level training institutions. Continued insight into American military culture and training is an important aspect of interoperability for the US and its allies.

Based on the current status of the Third Offset Strategy it is still possible for the US to mitigate the risk of running ahead of its allies by involving them in the continued process. During the implementation of different aspect of the strategy, the US should ensure compliance between legacy and new network systems, access to experimentation for allies and involve select and relevant parts of allies' defense industry. This is important if the US wants to maintain interoperability, and enable future NATO and multinational operations.

The Challenge - Continued Relevancy of Danish Defense Forces

Denmark has a vital interest in preserving NATO cohesion and the transatlantic link. This hinges to a great extent on the ability of Danish Defense Forces to project force in support of NATO's collective defense, and NATO or coalition expeditionary operations within the full range of military operations. At the same time, it is the task of the Danish Defense Forces to project power to the North Atlantic and the Arctic in order to preserve the territorial integrity of the Faroe Islands and Greenland.

These two competing factors influence the design of force structure and acquisition of capabilities. Given this situation, current and future capabilities must meet the Danish Defense Forces need for high end warfighting, an increasingly predominant mission type, but also ready to support low intensity operations. Additionally the Danish Defense Forces must be able to operate under arctic conditions. This only applies for specific army capabilities, like engineer construction and communication support. Consequently future navy and air force capabilities must support the Arctic mission set.

Currently Danish Defense Forces operate in the air, land, maritime and cyber domain, while operations are supported by access to the space domain through partners and commercial means. Danish Defense Forces must continue to be able to cover all present domains to some degree. At the same time developments in capabilities to maintain maritime and air situational awareness in the Arctic, points to a greater engagement in the space domain.

The current modus operandi is “joint through combined.” As such there is no operational joint Danish headquarter to direct joint operations. The designation of the arctic headquarters is misleading in that respect, as it is mainly focused on military presence in, and surveillance of, Danish territory while also providing and coordinating defense support to civilian authorities.

All three services and special operations command have tactical headquarters capable of integrating into the Joint Task Force level and down. Cyber operation capabilities, have been prioritized and are withheld at the Joint Defence Command directly under the Chief of Defence. The operational cyber forces conduct the full range of military cyber operations.⁵⁰

The current force structure does not fulfill NATO’s force goals, and there are vital capability gaps, especially within high intensity warfare capabilities. This is counterproductive to Denmark’s interest in protecting the cohesion of the alliance. Danish General K. Bartels stressed this in an unusual letter, to the Danish Minister of Defence, when he retired from his position as Chairman of NATO’s Military Committee.⁵¹ Given NATO’s refocus on collective defense, future force goals will focus more on sought after high intensity warfare capabilities and a high level of readiness.⁵²

Even if the 2% GDP defense spending level is reached, NATO's recommendation for Denmark to acquire Air to Air refueling capability, long range unmanned ISR platforms and a deployable airbase module currently seems unrealistic. Danish forces will probably always operate in a coalition environment, and these expensive capabilities are better provided by, others to take advantage of economy of scale. NATO force requirements will have to be taken into account, and are a dimensioning factor when developing future force structures, and when upgrading existing or acquiring new capabilities.

To provide options for how to maintain the relevancy of Danish Defense Forces, in a future shaped by the Third Offset Strategy, the availability of economic resources must be taken into consideration. As pointed out by NATO, a real probability exists for the acquisition of the F-35 to undermine other operational capabilities, leading to even greater capability short falls. Currently Denmark is halfway from reaching the 2% of GDP goal set out in the Defense Investment Pledge at the NATO summit in 2014.⁵³ This is a 10 year goal and, as highlighted earlier, it is not politically feasible to expect compliance with the goal, within the next defense agreement period.

At worst the expected increase in defense spending will only make up for the expected additional costs of implementing the F-35. This is estimated to be an increase of approximately 1 billion DKR annually (approximately 1.2% of GDP).⁵⁴ This does not however preclude changes to the current force structure, to better accommodate NATO's force goals and future operational demands.

A more optimistic outlook projects a bigger increase in the defense budget without mentioning any numbers.⁵⁵ An optimistic outlook would predict an increase from

the current 1.17 to 1.4 percent of GDP, at most an annual increase of approximately 5 billion DKR. Danish politicians will think this sends the right signals about commitment to NATO, and point to how much output Denmark creates for a modest input.⁵⁶ The increase probably accommodates for further investment in technology, to close the capability gaps pointed out by NATO, but standing up new material demanding capabilities will likely not be possible.

Long term defense planning after 2023, and a further increase in defense spending towards 2% of GDP, will likely probably accommodate further investment in new capabilities and technology.

Current Options for Denmark

Viable options for future force constructs and capabilities must support Denmark's current and future vital interest in maintaining cohesion within NATO. The force structure must be able to deploy in support of NATO collective defense and expeditionary operations across the full range of military operations. The force structure must fulfill realistic and relevant NATO force goals, within the available economic resources. Two distinctly different options exist. Either the defense budget will increase by 1 billion DKR or with up to 5 billion DKR annually. These two economic options will form the basis for a Danish approach to the Third Offset Strategy, as well as remaining relevant in NATO and coalition operations.

Increasing the Defense budget with 1 billion DKR annually presses the political establishment to make hard choices, with long term impacts on Danish Defense' ability to remain interoperable and relevant in a NATO and coalition setting. The available economic resources in this scenario, basically provides two alternatives: retaining status quo and risk becoming irrelevant in expeditionary operations, or prioritizing retaining

expeditionary capabilities and continued interoperability with the US in specific areas. Given the identified demand to remain relevant in both NATO collective defense and expeditionary operations, this option will focus on specializing specific capabilities for expeditionary operations across the whole spectrum of military operations. The other capabilities will have to be able to support national operations and NATO collective defense. For these capabilities, participating in expeditionary operations is not impossible. But, the range of operations will most likely not include major combat operations and high intensity warfare. Adjustments to better accommodate NATO force goals across the force must also be taken into consideration.

In the navy and air force the current force structure accommodates deploying capabilities in support of the prioritized missions in the Arctic as well as NATO and alliance operations. Air force capabilities like the future F-35 and the navy's Frigates, upgraded to participate in air and ballistic missile defense should form the back bone of Danish expeditionary capabilities. Other air force and navy capabilities will continue to support national operations and NATO collective defense, but will not be able to participate in high intensity warfare during expeditionary operations. The army must be able to participate in NATO collective defense and should restructure into one fully equipped brigade. This brigade would be capable of deploying battalion level battlegroups as part of NATO high readiness forces or the full brigade in support of NATO collective defense. The brigade could provide units for expeditionary operations, short of high intensity warfare. The remaining army units, the brigade and the reduced division level headquarters could be merged into a training- and capacity-building

brigade, if the necessary funds are available. Special Operations Command and cyber operation capability should remain at the current level.

The risk in this scenario is significant, as it will not support Denmark's vital interest in maintaining the cohesion of NATO. This option will provide the opportunity for Denmark to participate in high profile expeditionary operations with air and naval assets, even in a networked global sensor and strike system as envisioned in the Third Offset Strategy. With respect to the ultimate objective, maintaining the cohesion of NATO and US involvement, despite the expeditionary flexibility, this option is neither feasible nor suitable. However, Danish politicians accept the risks of a minimum investment within the constraints of the Danish national budget. For Danish industry a declining Danish influence in NATO, and a low standing in the US, will diminish possibilities for involvement in the development of technologies associated with the Third Offset Strategy.

An annual increase in defense spending provides a better possibility for Denmark to pursue its vital national security interests. An increase of 5 billion DKR annually can resource choices to optimize the force structure, invest in technology to close current capability shortfalls and remain interoperable with US forces in an expected future operating environment. Again the cohesion of NATO is vital to Denmark, and NATO force goals should inform changes to force structure and technology investment. The question still is what to prioritize. Future Air force F-35's and the navy's frigates still have the greatest potential for fitting into the global surveillance and strike network. For the army a continued and sufficient investment in the operational communications

infrastructure will enable its units to connect to relevant networks and retain its relevance in the full range of military operations in expeditionary operations.

The option supports Denmark's vital interest in maintaining the cohesion of NATO. This option will provide the opportunity for Denmark to participate in high profile expeditionary operations with assets from all services, even in a networked global sensor and strike system as envisioned in the Third Offset Strategy. With respect to the ultimate objective, maintaining the cohesion of NATO and US involvement, the ability to contribute to NATO collective defense and expeditionary operations, this option is deemed feasible. In the short term the option is acceptable to NATO allies, but it is a political task to motivate the increase in defense spending internally. Unless the option is backed by a long term plan to reach NATO's 2% of GDP goal the suitability of the option is less than optimal, especially as most significant future technology investments in relation to the Third Offset Strategy will be in the mid and long term. For the external stakeholders the option is acceptable in the short term, based on; the increase in resource allocation, the possibility for technology investments and the expanded capability to participate in both NATO collective defense and expeditionary operations. For internal stakeholders, the Danish population, an increase in defense spending is likely acceptable if it is supported by a majority of political parties in the parliament. The involvement of Danish forces from all three services in technology investments, and a continued visible profile in NATO and expeditionary operations will be beneficial for Danish industry. If not directly involved in solutions for the Third Offset Strategy, there will be a possibility for Danish industry to provide systems that tie in with the technologies of the Third Offset Strategy.

The two options represented in this paragraph are first and foremost based on strategic political choices about how best to use the nation's resources and protect the national security interests. The consequences of the Third Offset Strategy for interoperability within NATO and in coalition operations so far have not unfolded. It seems almost certain that NATO members who do not already possess or plan to; invest in an advanced, robust and alliance interoperable operational communications infrastructure combined with relevant command and control systems for all their services will not be able to integrate into other NATO or coalition force structures. Despite the uncertainties with respect to the Third Offset Strategy and the strategic environment, this analysis has shown how even smaller allies can prevent being sidelined in NATO and alliance operations. By making strategic choices which supports their long term interests, focusing their defense forces on high end warfighting,

Perspectives for Smaller NATO Countries

The ambition in NATO has never been for all members to have the same capabilities as the US. The ambition in NATO is for member states to be able to defend their own territory, and operate together in collective defense. This implies fighting wars together, should deterrence fail. Whether a small or large alliance member, there is a need for continuous investment in new technology, and implementing new warfighting concepts to overcome the threats of today and tomorrow. Role specialization is a popular thought among some scholars and politicians, as it provides for efficiency, but not necessarily effectiveness. As this analysis has shown, role specialization is a dangerous course for small member states, and ultimately contradictory to their national interest. Military role specialization leaves states without means to protect their territory and sovereignty. Larger NATO member states on the other hand, to some extent,

uphold specialized and expensive capabilities, to maintain the ability to influence their national interests on their own. For small countries operational integration continues to take place at the tactical level, as part of bigger force constructs provided or lead by the bigger and more capable alliance members. What this implies is that, even as new technology becomes available, smaller alliance members, should still focus on maintaining core warfighting capabilities. These capabilities must be able to connect to provide information for and utilize information on current and future battlefield networks. For this to manifest itself, the USA must recognize and mitigate the possible negative consequences of the Third Offset Strategy for NATO's cornerstone, Article V and the commitment to collective defense.

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