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ARMED FORCES FOR TOMORROW

EDITED BY TOMMI KOIVULA and JYRKI HELMINEN

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THE TENTH SUOMENLINNA SEMINAR

The 30th and 31st of May 2007



Doctor of Social Sciences Tommi Koivula was the responsible organizer of the tenth Suomenlinna Seminar. He edited this publication in co-operation with research assistant Jyrki Helminen. Dr. Koivula works as a senior researcher at the Department of Strategic and Defence Studies, where he specialises in the European Union security issues. Previously, he has been a lecturer at the University of Tampere and a visiting researcher at the University of Kent at Canterbury (UK).

Editors' note

The tenth annual Suomenlinna seminar, organized by the Department of Strategic and Defence Studies, Finnish National Defence University, was held in May 2007. It brought together a representative group of specialists in security studies for two days of presentations and discussion about the most pressing issues of today – how to best utilise national military resources to meet the challenge of future security threats.

Most of the presentations made at the seminar are published in this volume. We wish to extend our thanks to all contributors for their patience and cooperation.

Tommi Koivula and Jyrki Helminen Editors Department of Strategic and Defence Studies NDU, Finland

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Foreword and a Summary of Key Findings

Colonel, Lic.Pol.Sci. Juha Pyykönen Director, Department of Strategic and Defence Studies National Defence University of Finland

The armed forces in the Western world have been in transition for some years now. The key question has most often been what sort of roles and missions will there be for the armed forces in the 21st century. Logically, the follow-up question has related to the request for capabilities, capacities and assets. Governments struggling with shrinking defence budgets have also pondered whether rationalisation at some level could be a solution, or at least a part of a solution. This could be seen relevant among neighbours, who no longer pose any threat on another, and/or are members of the same military or political alliance. In addition to, for example, reducing force levels, a wider division of responsibilities for maintaining and developing military capabilities has been addressed.

The tenth Suomenlinna Seminar was primarily organised in order to find some answers to the questions listed above. The participants were asked to elaborate the question of what sort of roles and missions for the armed forces should be dedicated by the year 2020. To set the scene for the seminar, the first session was dedicated to illustrate a future of emerging security threats and conventional war.

The ultimate goal for the seminar was to search for new ideas and new perspectives as how to best utilise existing national military resources to meet challenges posed by future security threats. As a point of departure, a hypothesis was that similar challenges would apply very much throughout the whole of the Western world.

In addition to traditional speaker presentations and to facilitate brainstorming, new ideas and perspectives to pop up, five working groups were established based on participants' expertise and knowledge. A chairperson and a supporting staff member were also assigned. Each working group received a skeleton diagram on which they were asked to illustrate possible roles, issues, topics, qualities or capabilities that they regarded as most relevant in this context. Furthermore, there were two categories for relevant issues, namely one for the current situation (2007) and one for relevant ones in 2020.

As a short summary, the following issues, *inter alia*, were addressed by the working groups.

Most prominent future threats were deemed to be terrorism, regional crisis, internal instability and conflicts and information warfare. Each of the groups found the problem of identifying the enemy problematic. Quite interestingly, a more conventional threat of arms race and proliferation of weapons of mass destruction were generally regarded to pose a serious threat also in the future.

As a response to the threats stated above, crucial future roles for the armed forces were judged to be homeland defence, humanitarian relief, support of the civilians and internal crisis management. Most commonly stated future military capabilities were expeditionary missions, intelligence and information operations, civilian-military cooperation and force protection.

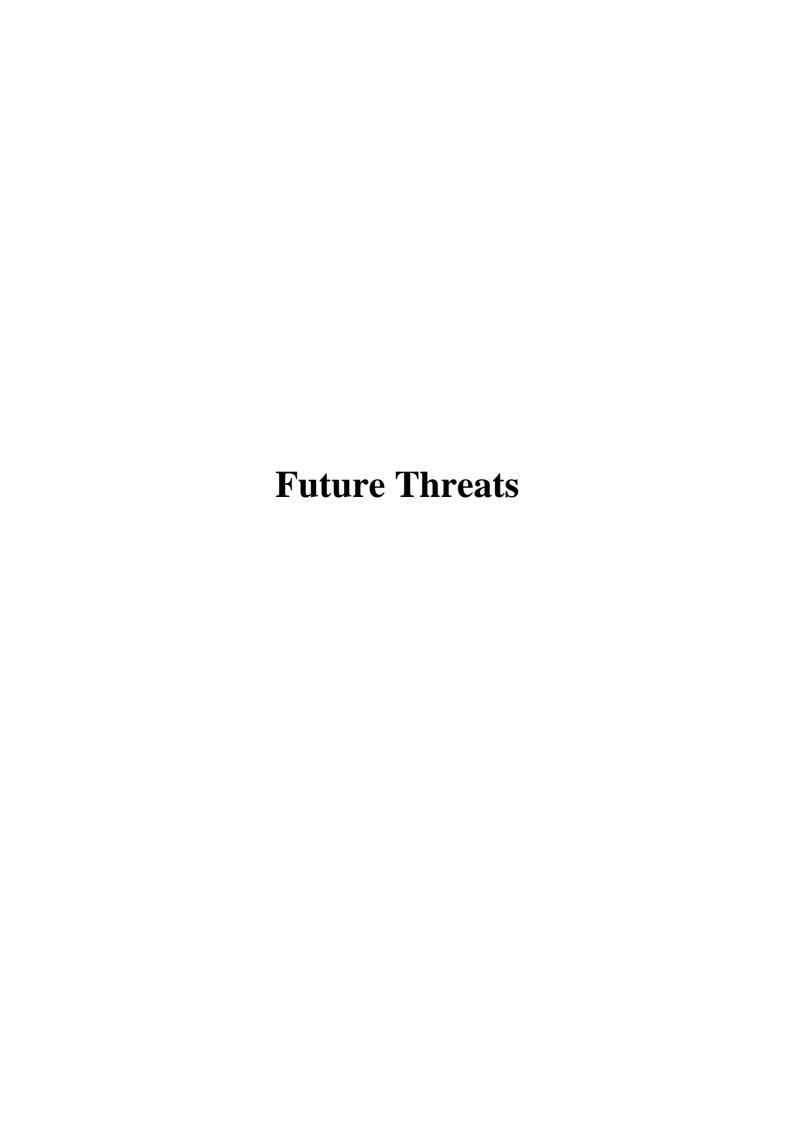
There was a strong common agreement that a more complex operating environment has emerged, already today. Difference between "war" and "peace" situations was quite often characterised as "blurred". On the other hand, a deep interconnectedness of all the elements of threats, roles and capabilities was recognised leading us to a situation where we are continuously in an unspecified space. The proper management of these crises entails a combination of various military and civilian capabilities. There should be no going back to separate action by the military or the civilians. On the contrary, crisis management has become a comprehensive and holistic enterprise.

One of the key findings was that the military's gradually changing role in security is bringing it from present military capabilities to less violent oriented and more multiple issues such as security, stabilization and reconstruction. It was often mentioned that it looks like the other powers and authorities than the military seem to gain extra leverage. Even though in many cases military victory may be indispensable, it will not guarantee success as such. Rather, the success will be measured by objectives beyond the simple military victory.

The working groups envisioned a smaller and "smarter" military to meet these demands. A number of tangible elements needs to be developed to the extent that the demands on tomorrow's armed forces seem almost overwhelmingly diverse: while they are expected both to sustain their traditional defence capabilities and to be prepared to participate in military as well as humanitarian missions in distant regions, they are simultaneously expected to efficiently cooperate with civilian authorities and to have extensive knowledge of different cultures and languages. To fulfil these demands, future forces should be able to operate in changing roles of a conventional soldier, a military policeman, a reconstruction worker and an expert on civilian society's institutions and administration.

When facing all these versatile demands, nations should concentrate on prioritization and cooperation. Limited national resources are forcing nations to prioritize operations they are going to participate, most likely by considering which one serves their national interest most and also respecting demands produced by the possible alliances. Taking into consideration all these demands, it seems quite self-evident that international cooperation would be a logical choice to combine limited national resources and to complement each others' deficiencies.

The reader will find more profound analysis in the following chapters. The organising party found it very informative to collect and analyse numerous and varying views and perspectives of participating professionals. Of course, no final solution or guidance is offered here, but some insights and food for thought for further elaboration is provided in this publication.



The Future of Major and Minor Wars

Raimo Väyrynen Finnish Institute of International Affairs

Changes in the character and functions of warfare are not accidental development, but they display long-term trend and underlying structural transformations. Although the exact nature of the future warfare is unknown, there are ways to peak into the future and argue, among other things, that the probability of a large-scale war between major powers has been and will continue to diminish. If this is the case, the era of the total war may be drawing to an end. In fact, the risk of unlimited warfare has been an exception in the history.

Military Technology and Society

Feudal wars were limited in many ways. The capabilities of warring parties were restricted and often were inadequate to destroy the enemy even if the intention might have existed. In feudal warfare also a code of chivalry, informed by early Christian principles, existed; the aim was not to fight to extinction, but rather to measure which side was preponderant and then cease the fighting until new circumstances forced to resume it. In effect, constraints in the feudal warfare were very political and even moral in nature. On the other hand, the objectives of the feudal warfare were not equally political but they concerned more the reallocation of landed property and labor force. Feudal warfare came to an end as a result of the gradual demise of feudalism itself.

From the 14th century on, the development of military technology started to shape more directly the pattern of warfare. Fire weapons became more common and they required a better trained and organized military force. The number of troops multiplied and their tactical uses became more flexible. Warfare called for bigger investments of money by the monarchs who fell badly in debt as a result. From the 16th century on European armies experienced a military revolution spearheaded by the Dutch and Swedish armies. The expansion of the military forces, often containing a strong mercenary element, inaugurated a period of continent-wide wars of which the Thirty Years War is a prominent example.

The naval technology and warfare also assumed new dimensions, partly as a result of the global acquisition of colonies and naval bases. Thus, the transportation revolution had also military implications and major powers started to fight wars with each other even outside Europe (e.g. Ten Years War in North America between Britain and France). Colonial wars pitted

the expeditionary forces from the North in an asymmetric fashion against the indigenous forces of the South. The Russian expansion to Siberia provides vivid evidence on how badly the conquering expeditions dealt with the local "small" people. While the "highest stage of imperialism" did not result in a generalized war between major powers, the colonial wars remained an international phenomenon until the 1970s when Portugal left its African colonies.

The French Revolution opened a new chapter in the history of warfare by making it a mass phenomenon. In fact, the Napoleonic wars have been called the first total war. *Lévee en masse* organized by France aimed at the extensive mobilization of the nation for war. The Napoleonic mass armies were able to reach, among other places, Egypt and the gates of Moscow, but these operations also showed that the limits on national resources and the logistical problems of far-flung operations restricted military effectiveness and political success. Yet, the era of mass armies had started and warfare had been transformed into a more costly and destructive affair. The long peace of the 19th century limited – with some exceptions, such as the Crimean War - the destructiveness of wars, but the issue itself did not disappear.

The Lethal Century

Niall Ferguson has called the 19th century as "the lethal century" because of the enormity of destruction brought about by the "war of the worlds", to quote Ferguson again. The new scale of destructiveness became very obvious in World War I, when mass armies fought each other for some four years in the "Great War". Soldiers were killed in the trenches by the millions and new military technologies were adopted. The era of cavalry was not yet quite over, but the demise of old military traditions had started.

Sometimes World War I has been called the chemists' war as a result of the use of chemical weapons at Somme and Verdun (while World War II has been called the physicists' war because of the development and use of the atomic bomb). It can be argued that the long duration and extensive human and material destruction in World War I sparked a cultural change in public thinking on war; instead of a heroic encounter, war was increasingly perceived as an ugly and detestable institution. The establishment of the League of Nations and formulations in its Covenant provide testimony on the turning of tide in the attitudes towards warfare.

The turn was not, however, strong enough to avert the occurrence of another great-power war, i.e. World War II. A main reason for the return of a major war was that the Paris Peace Treaty in 1919 was unable to create a

stable and legitimate international order and thus permitted the return to political and military rivalry in Europe. The rise of nationalism, economic protectionism, and fascism fuelled further that competition. World War II was even more destructive than World War I; it was a genuine global war and its destructiveness was further added by the strategic bombings in Europe and the employment of the atomic bomb in Hiroshima and Nagasaki in August 1945.

The Waning of Great-power War

World War I created a collective trauma on the nature and consequences of the modern war and this trauma was further deepened by the experiences of World War II. In the popular opinion in Europe, the feelings of "never again" and "without us" became widespread. A sort of taboo emerged against the large-scale use of force and it was directed especially against nuclear weapons and their use. It is undeniable that the development and use of nuclear weapons has been the single most important military revolution in the world history. My contention is that the waning of major war – i.e. a war between great powers – is the key legacy of World War II. No such war has been waged since 1945, although both the Korean War and the Vietnam War brought them into an indirect confrontation with each other.

The fear of total destruction – that the use of nuclear weapons would bring about – sealed the end of the great-power war. There were, of course, also other factors that influenced in the same direction, such as the establishment of multilateral institutions – especially the United Nations – and the strengthening of the normative framework against major war. Thus, while nuclear deterrence and bipolarity helped to stem warfare between major powers, there have been also institutional and normative changes that have contributed to this peaceful revolution in international affairs.

It is interesting that the decreasing probability of war among the major powers has co-existed with the institutionalization of a territorial international system of sovereign nation states; the "territorial covenant" as some scholars likes to call it. Growing economic interdependence, or globalization, has obviously created common material interests that have mitigated the urge to go to war. Yet, I would argue that the emergence of a more civilized system of sovereign states has been a more important reason for the waning of major war than economic globalization *per se*.

Obviously, it is not credible to maintain that a war between great powers will not ever occur again, even though we have had a peace between them for over sixty years. I am quite confident, however, that it is unlikely that

we will face in the future a power transition that would lead to a major war as established theories of political realism would suggest. It is conceivable that China will go through a "peaceful rise" or "peaceful development", as the official Chinese doctrine claims, rather than fight a "hegemonic war" with the United States, the "declining hegemony". In the new circumstances, we may have to rewrite a bit of Clausewitz and argue that the resort to major wars is about to be replaced by other means, economic and political competition peppered only by a limited use of force and coercion.

The argument made above does not mean that war and violence are disappearing from the face of the earth. Statistics on warfare show clearly that since the 1960s the number of wars between states has been in decline. It is still possible that two states, especially in the South, fight a rather traditional border war, as has happened between Ethiopia and Eritrea, or might in some circumstances occur between India and Pakistan. Even in such cases, external powers or international organizations would step in, however, and try to stop the war and demarcate the border as has been tried between Ethiopia and Eritrea. Because of the "territorial covenant", it is difficult to imagine that even medium or small powers would be permitted to fight a prolonged war across national borders.

Another reason for the decline in the utility of war is that the meaning of victory has become more and more elusive. In a border war, a state may acquire thousands of square miles of territory, but if that is largely inarable land, what benefit does it bring about for either side in the war? Moreover, in "new wars" the concept of victory is difficult to apply; violent encounters are asymmetric and while weaker side cannot necessarily win in any strategic sense, it may be able to tie down the stronger party in a manner that its political position becomes untenable both internationally and at home. The political functions of violence are also becoming more blurred and its use is often motivated by greed and the search of lootable resources.

Recent developments in Afghanistan and Iraq show beyond any doubt that the expectation of a brief and victorious war is as unrealistic, although in different circumstances, as they were in the two world wars of the "lethal century".

The Perseverance of Military Interventions

All this does not mean that war and violence are vanishing. In some respects, the use of violence is well and alive, but its nature and functions have changed. This is evidenced at least by two trends discernible in international relations; the continuing resort to military interventions and the rise of small-scale, local violence. Military intervention is not a rare phenomenon in international politics; by one count, some 300 interventions have been carried out after World War II. Military interventions do not constitute any single, coherent category of action but they come in many shapes and sizes. Moreover, one can discern some changing trends in their character and objectives.

Military interventions by a single state against another, usually weaker state are becoming less common. One of the reasons for this development might be that previously interventions were conducted by major powers against dependent states. Often this dependence was created by colonial relationships and interventions were used to stop the search of national independence; e.g. the Dutch intervention in Indonesia in the late 1940s or the French intervention in Algeria in the early 1960s. Another possibility was the use of military force in center-periphery relationships against recalcitrant states; e.g. the interventions by the United States in Central America and Caribbean.

Now that the global colonial system has been abolished, the need of unilateral military interventions by the preponderant power has all but disappeared (although the Russian fighting in Chechnya can possibly be placed in this category). Of course, major powers have not completely mended their bad habits, but their use of interventionary force happens in a different context. In particular, the interventions are now quite often carried out by multilateral coalitions (in which there is often a lead nation). The search of a multilateral solution and the blessing of an international organization – either the United Nations or regional organizations – hints to the importance states attach to the collective legitimation of their military operations. Even the United States, which is prone to use unilateral force, tries to establish "coalitions of the willing" to support its military activities.

The ideal type of military intervention is a peacekeeping operation decided by the UN Security Council. The aim is to send in international troops which have the task of ending the war and preventing relapse to violence. It is well-known that the United Nations is today involved in more military operations than ever in its history; in the field, there are more 100,000 "blue helmets" from a greater number of countries than ever before (though dwarfed by the presence of 170,000 U.S. troops in Iraq alone). Many of these operations are informed by the humanitarian motive enshrined in the

new doctrine on the "responsibility to protect. The doctrine was enunciated a few years ago by an international commission and strongly advocated by Kofi Annan when he served as the UN Secretary General.

The humanitarian motive is a noble and necessary one. It is true, though, that it has been applied in an uneven manner and, even if applied, the results have remained incomplete. It is simply very difficult to bring peace to places like the Democratic Republic of Congo or Somalia (which also provides an example on the mixture of a unilateral Ethiopian and multilateral intervention). In addition, the Security Council may be incapable to act due to disagreements among its permanent members. At a minimum, the decision to act is delayed by the opposition by one or more permanent members as happened in the case of Darfur in which China was reluctant to agree on any kind of intervention that the Sudanese government disliked.

Darfur provides also evidence on the rise of regional organizations in peacekeeping and crisis management. The Darfur peacekeeping operation, launched by the UN Security Council in August 2007, is a large "hybrid" operation by the African Union and the United Nations. The contribution of industrialized countries is necessary because the African Union does not possess adequate material, logistical, and organizational capabilities to conduct a successful operation in such a vast area as Darfur. Yet, the trend seems to be pointing in the direction that regional organizations are taking a greater responsibility to restore and keep peace by military means in local hotspots (an interesting case to follow is whether ASEAN will assume a role in keeping peace in some of the volatile Pacific islands where Australia is now the key regional power).

The role of regional organizations in peacekeeping and crisis management concerns also the mandate of intervention. Today, in international law, only the United Nations and the Organization for Security and Cooperation in Europe (OSCE) has the mandate to launch military operations. However, OSCE has not conducted a single military operation so far, while in the UN the Security Council may be blocked to act by the veto of a permanent majority or the majority of the Council. This has raises the question on whether other international organizations should assume a power to give a mandate for a military intervention. The mandate issue is different from the leadership in the conduct of an operation. So far, NATO has not directly mandated a crisis management operation, but has, for instance, directed the ISAF operation in Afghanistan since 2004.

The European Union has been moving farther in this regard. Although the EU has shied away from competing with the United Nations, it has in reality its own procedures in the European Security and Defence Policy to

decide on its crisis management operations. These procedures have been further specified in the Reform Treaty that is now in the process of revision and conclusion. Moreover, the EU is gaining experience in the conduct of crisis management operations in Bosnia, but also in places like Aceh and Lebanon where it mobilized troops from member countries operating under the UN. It appears that in the future the workload of the EU in crisis management will continue to increase, the establishment of battle groups is beefing up its operational capabilities, and it will be increasingly sought as a partner in various types of hybrid operations involving also the UN and regional organizations. It is an open issue to what extent the EU is prepared to participate in hybrid operations or whether it prefers to go alone in crisis management.

New Types of Local Violence

Another new trend in global violence, apart from the growing resort to various types of military interventions, concerns the rise of "microviolence". In a sense, terrorism can be identified by that label as terrorist strikes are specific and sporadic uses of violence to obtain political goals. The humanitarian consequences of terrorism have been vastly exaggerated as the number of people killed in terrorist attacks has remained limited and dwarfs in comparison to the number of victims of other kinds of violence. In fact, a more important form of micro-violence is the systematic killing and maiming of people in local conflicts. I am not speaking only on civil wars, but even more limited uses of violence.

As the number of interstate wars have experienced a long-term declining trend, the number of civil wars increased in the 1990s, especially its first half. Since then, also the number of civil wars has decreased which gives reason to believe the world is becoming a more peaceful place (though there is evidence that during the last couple of years civil wars have slightly increased again). This conclusion may be, however, erroneous and based on too a narrow conception of violence. For this reason, we need a more nuanced concept of micro-violence. It should capture also such forms of deadly violence in which the parties are not necessarily well organized and the state may not even be a party. Many a civil war in Africa displays elements of such an informal and unorganized, yet deadly violence.

To take an example, India, as a democratic and growing nation, is not usually considered to be at war. Even leaving aside the occasional pogroms between Hindus and Muslims, this perception may not be correct, though. In reality, an undeclared civil war has raged in states like Assam and Bihar. In the impoverished Bihar alone, 2000 people were killed in political violence in 2006. Few years ago, South Africa was in the throes of a

similar pandemic of violence, while parts of Brazil may serve as yet another example. In many countries, which as a whole might live in peace, there are violent environments in which physical violence, economic crisis, environmental destruction, and human rights violations accumulate into a humanitarian crisis.

The rapid pace of urbanization is creating entirely new social conditions for violence on which there is little reliable statistical information on the number of victims. In today's world, there are 20 mega-city regions with more than ten million people and 450 city regions with over one million residents. An increasing number of large and growing city regions are in the South. The urban forms in various mega-city regions differ from each other, but one of their common features is segregation of people into different habitats. The social distance from the business center to the slums is often much longer than the physical distance. Unequal social conditions foster violence that has a class character; the kidnapping of business people is a lucrative profession in many large metropolitan areas. As a result, helicopters are increasingly popular vehicles for business people moving from one place to another in a city like Sao Paulo.

Urban violence has both economic and political motives. Gangs may be fighting each other, for instance, for the control of the local drug market. In the 1990s, the number of homicides peaked annual to over one hundred in Gary, Indiana, a city of 100.000 people as the drug gangs from Chicago and Detroit were engaged in violent struggles. To calm down the situation, the Governor of Indiana had to send state troopers in this former home town of U.S. Steel. More generally, gang bosses in the large slum areas are establishing private armies to secure their political control of and economic access to the growing shanty towns. Cities like Johannesburg, Karachi, Nairobi, and Sao Paulo are infested with violent crime from which the local people suffer most.

It may be said that growing urban violence is not a security issue, but the problem for the crime control. This is true, of course, but still the question is about physical violence. Ultimately, for an individual it may not make much of a difference whether s/he is a victim of war or criminal violence. In addition, public agencies are necessarily part in the control of violent crime; not only the police but in some cases also the army. For instance, the Brazilian government had to send in the army to control violence in the *favelas* of Sao Paulo.

Conclusion

We are living in a divided world. On the one hand, it is becoming a more peaceful place. The risk of a major war between great powers is minimal and this happy situation seems to continue in the foreseeable future. Although organized civil wars are a distinct possibility, especially in the South, even their number and destructiveness are in decline. Violence in bloody civil wars in Angola, DR of Congo, Liberia, and Sudan is under some control. In other words, the use of organized military force either between states or inside them seems to become rarer and less destructive. However, trend is only a trend and cannot exclude the possibility of large-scale violent encounters and even genocides.

This does not mean that peace has come to the face of earth. Large-scale violence in developed countries is reasonably well controlled, although occasional terrorist strikes and violent ethnic protests are a distinct possibility. The risk of micro-violence is much higher in the unstable areas of the South in which it has become a method of business and politics and even a way of life. Traditional methods of intervention, from peacekeeping to the unilateral use of force, are hardly feasible in quelling such violence. The control of violence is becoming more and more a police problem on which the rise of the civilian crisis management and the need to coordinate it with the military operations is a telling sign.

Raimo Väyrynen is the director of the Finnish Institute of International Affairs and former president and Director General of the Academy of Finland.

Emerging Security Threats

Robert Dalsjö^l Swedish Defence Research Agency (FOI)

Providing a picture of emerging security threats presents problems on several levels. Events and trends on the world stage seem to whirl like the pieces of a kaleidoscope. And any assessment or prediction is fraught with uncertainty. We cannot know which bombs will go off and which will fizzle. And we cannot see all bombs. Still, it seems possible to highlight a number of factors and threats which deserve our attention. Some of these are of 'new' or untraditional nature, at least when it comes to being the focus of attention. Others are more traditional in nature, but are new in the shape they take. I will start out by looking at some of the threats which involve new types of actors or manners of warfare, such as Jihadism, and then move on to look at threats emanating from major states increasingly unsatisfied with the status quo. I will end with some rather bleak perspectives concerning the West's ability to deal with these threats

Asymmetric Conflicts

As concerns new actors and forms of warfare, it seems natural to use as a point of departure two perspectives first presented in the early 1990s, but still highly relevant in the debate.

The first perspective was presented by Martin van Creveld in his book *The Transformation of War*, published in 1990. His basic argument, which is based on Israeli experiences in Lebanon, is that the West's war machine has become so effective that any opponent which appears in a conventional and symmetric military form will simply be blown away. Thus our opponents will – unless they are stupid – chose other routes, such as asymmetric warfare conducted by a guerrilla dressed in civilian clothes and using civilian vehicles. With their ability to blend in with the population, they will conduct hit-and-run attacks, which will be very hard to counter. Van Creveld pointed out that 90% of all military inventions since the advent of gunpowder are based on the premise that you can easily identify your opponent in the field. When this premise no longer holds, much of our sophisticated gear becomes useless.

¹ The author is a Senior Analyst with the Swedish Defence Research Agency, FOI. He is, however, solely responsible for the content of this paper, which does not necessarily reflect the position of FOI, or of the Swedish government. In the editing, a few references have been added to events that took place between the seminar and the delivery of the manuscript.

Asymmetric warfare, or counter-insurgency (COIN), is one of the most difficult tasks a military force can engage in, even for the very best of armies. The record of successful cases since 1945 is rather short, while the list of losses is long: the Dutch East Indies, Indochina, Algeria, Afghanistan, Somalia, and Lebanon are but a few examples. Today we have Iraq, Afghanistan and Somalia. The Ethiopians are finding that like Baghdad, Mogadishu is easy to take, but hard to hold.

Asymmetric warfare and methods of counterinsurgencies currently attract a lot of attention, both within the military services of the great powers, and within the international academic community. Despite abundant writings, there are no fireproof recipes that work in practice. That is, at least, unless one applies methods from the Old Testament, which hardly is our line of business.

Most writings on the subject emphasise the need for bringing together assets of very different kinds – military, humanitarian, police, medical etc – in a concerted two-prong effort to help the population and win their support, while at the same time combating and marginalising the militants. There are different labels for this: comprehensive approach, integrated approach, whole-of-government approach, etc, but the basic message is similar.

In Sweden, we are having some difficulties in making progress on this matter. Apart from the usual resistance to change found in almost any organisation, and the ever-present problem of turf, there seems to be two main causes. One is that large parts of the humanitarian and developmental community find working together with 'the military' highly unpalatable, and they resist what they see as encroachments on their autonomy and on the 'purity' of aid. While such an attitude may be understandable and acceptable among non-governmental organisations, such as the ICRC or MSF, it is rather inappropriate when it comes to state agencies dealing with aid and development. In many parts of the world, such as Darfur or Tchad, it is patently clear that the outside world cannot help the long-suffering people to rebuild their lives, unless the there is a military force that provides security for both inhabitants and aid workers. In other places, such as Afghanistan, it is equally clear that we will not have progress on bringing peace and the rule of law to that country unless common people see improvements of their daily lives. Development needs security, and security needs development, and they have to work hand in hand. Given this, it seems reasonable that -if the Swedish government decides to help the people of e.g. Chad, all the relevant agencies of government should act together in support of a common goal.

Another, although somewhat lesser, problem is that there are still some in the Swedish body politic and government agencies who are uncomfortable with the very notion of doing counter-insurgency, which does fit well with their self-image. Counterinsurgency is something done by amoral and brutal great powers, not by nice little countries like Sweden, the line might go. The experiences from Bosnia in 1993-1995 led most of Sweden's public and professional opinion to not only accept chapter VII operations and the use of force, but to embrace them. But remnants of old thinking remain, and there is some way to go before the systems realises that COIN is the order of the day. After all, almost all of the operations that we have engaged in later years — Bosnia, Liberia, Congo, Afghanistan — are counterinsurgencies on one form or other. We need to acknowledge this and draw the consequences.

A Clash of Civilisations?

The second big thought on emerging threats is still, whether one likes it or not, Samuel Huntington's notion of a clash of civilisations, first presented in the early 1990s. Simplified, his basic thesis is that that the end of the ideological conflict between communism and liberal democracy, and the dissolution of the communist 'camp', emphasised the existence of culturally defined entities, and the risk that some of these might come into conflict with each other. The most obvious candidate for such a conflict is between the Islamic world and the group of states whose cultures have grown out of the Western form of Christianity. While Huntington's ideas are controversial – or even reviled – in some quarters, the fact that they are still discussed almost 15 years after the original article, testifies to their power. Moreover, the debate over whether Turkey should be allowed to join the EU shows that his idea of cultural fault lines is not only an academic construction. I also believe that many people in Finland and in the Baltic states are very much aware of a similar fault line along their eastern borders: it is no coincidence that the coats of arms of Finland and of Karelia contain symbols of this.

9/11 and Jihadism- a Fusion of Van Creveld and Huntington

Al Qaeda's strike against the twin towers, with forerunners in earlier strikes at the same place and against US embassies in Africa, represented a fusion of Van Creveld's asymmetric insurgencies with Huntington's clash between the West and militant Islam. Even if some in the West refuse to accept the existence of such a conflict, this is still clearly how many within militant Islam see it. And thus it becomes a reality, whether we like it or not. This struggle is not confined to places like Afghanistan, Iraq or

Somalia. Neither are the lines of conflict drawn in places like the Bosporus or the Mediterranean. The lines are now drawn in our own countries and cities, and that is also where part of the struggle is waged: Madrid, London, Amsterdam may just be the first in a long line.

Depressingly, this is not only a matter of a failure to integrate immigrants with Moslem backgrounds into our societies. It also seems to be a failure of integration achieving the expected results. Many of the suicide-bombers in Britain, as well as the youth that murdered the Dutch film-maker Van Gogh, were second- or third generation immigrants who had previously lived a 'Western' life. One of the London bombers even spoke with a Yorkshire accent. Thus, the outward signs of integration does not immunise youth against the seductive radicalisation that takes place in some mosques, in prisons, and not least over the internet.

For a number of years now, there has been much confident talk in military and industrial circles in America and in Sweden about 'Network Centric Warfare' and of how new types of information technology would help us wage war much more effectively in the future. Likewise, there are ideas about a 4th generation of warfare, in which media and the internet are used to create effects directly on the target. It seems ironic that the first to have put such ideas effectively into practice have been the Jihadists. While these capabilities are in the West still mostly promises on power-point slides, Jihadists have already successfully used existing network tools, such as the internet and mobile phones, to attract proselytes, spread propaganda, and coordinate activities and strikes. That an amorphous group of hateful young men advocating a violent return to the Middle Ages would beat the Western military-industrial complex by about a decade or so, is a both sobering and worrying thought.

A Long War?

It has been suggested that parallels could be drawn between the current struggle against militant Islam, and the struggle against Communism which dominated much of the 20th century. In both cases, it is argued, it is an ideological struggle with a need for a long-term approach, containing the enemy abroad until it crumbles under its own weight and contradictions, while simultaneously neutralising and marginalising the enemies within. According to this view, today's militant Islamists in our countries would be akin to the Communists in our societies from the 1920s to about the 1970s (whereafter they became a marginal sect). A key role in defeating the Communist threat within was played by Social Democracy, which helped win the allegiance of workers to the democratic state. Our problem is that when it comes to today's militant Islam, we are still, so to say, before the

party rifts of 1917. The Islamist movement has not yet split into discernible revolutionary and reformist camps. And any movement in such a direction has to come from within, if it is to have any chance of succeeding. It must be genuine and cannot be orchestrated from the outside. I at least, have not seen any signs of this taking place, so far.

Other Clouds on the Horizon

The current focus on the challenge of Jihadism must not cause us to neglect a number of other factors which could cause us serious problems in the close to mid-term perspective. Limitations of time and space mean that most of these will only be signposted here, however.

Nationalism is on the rise in some parts of the world, including areas close to us. So is religion, not just Islam. Swedes tend to see nationalism and religion as 19th century phenomena, which mankind leaves behind in his assent to modernity. We thus tend to underestimate the attraction and power of these forces, but we do it at our cost.

Failed states are still with us and continue to cause serious problems. The same applies to the proliferation of nuclear weapons, ballistic missiles and precision-guided weapons, which are accelerating. Combine these two into the failure of a state armed with nuclear weapons and ballistic missiles, such as Pakistan or North Korea, and we have the recipe for a night-mare. Then we have globalisation, which slowly but inexorably changes the relative weight of states and of groups within states, as well as resistance to globalisation and its effects. And we have —partly as a result of globalisation, probably also of climate change — increasing competition for resources, including water and energy.

The Rise of China

A case which captures many of the aspects mentioned above is the rise of China, with all its implications concerning economic matters, access to resources, political aspirations, and military might. The current really existing situation in mainland China is an odd and very un-Marxist combination of a Marxist-Leninist political system and a mostly free market economy. The question of how long this contradiction can last is highly relevant. One can hardly rule out that the Chinese Communists will perform a manoeuvre similar to that performed by the Yugoslav Communists in the 1980s. When Milosevic and his ilk saw that Marx and Lenin were losing the power to legitimize their rule, they changed shirts and became nationalists. But riding the tiger of nationalism can be a very

dangerous exercise. Fanning the flames of conflict with neighbouring countries is part of the package, but at some stage leaders might come to a situation where they would have to choose between going from a war of words to a real war, and backing down in a humiliating manner. A government unsure about its domestic position might be more prone to take a risk in foreign policy, as did the Argentine generals in 1981. There are those that see parallels between the current situation in eastern Asia and Europe before 1914.

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Resurgent Russia

Closer to home we have a resurgent Russia. The fact that Russia is recovering from the political turbulence and economic meltdown of the 1990s need not in itself be a reason for worry. What is worrying are the clear signs - which only fools could ignore - that Russia's internal and external policies are heading in an ominous direction. Internally, society and politics are becoming openly authoritarian. Stability has been achieved, but at the expense of democracy. Media has been brought under the Kremlin's control, parliament has been tamed, and the oligarchs neutered. The tiny opposition parties that exist are beaten up by legions of riot police if they try to demonstrate in the streets. Critical journalists and dissidents are murdered – even abroad – or locked up in mental hospitals. Ex-KBGmen hold many of the reins of power, and corruption is rampant. Nostalgia for the Soviet era is manifest, and the Kremlin has decreed that schools must use a history book that glosses over Stalin's crimes and highlights Soviet achievements. Violent xenophobia and extreme nationalism is common, and thousands march openly under the swastika. The Kremlin has its own Nashi youth movement to harass and attack undesirables, including diplomats and dissidents. It seems as if Putin is trying to recreate the Soviet Union, but without communism.

In the 1980s, it was not uncommon to refer to the Soviet Union as 'Upper Volta with rockets'. Today's Russia might likewise be called 'Nigeria with nuclear missiles'. And one might, as Michael Clemmesen has, add 'with a pre-1914 mindset'. The growing prosperity of latter years is almost entirely due to the rise in energy prices. But the Kremlin's bulging coffers has nonetheless led to a palatable increase in Russia's assertiveness vis-à-vis the outside world. The cooperative stance taken after 9/11 has been replaced by a role as spoiler of the West's plans and as bully of small neighbours, reminiscent of the Primakov years. Energy supplies are openly used as a weapon to blackmail former Soviet Republics to return to the fold, and to sow division within the EU and Nato. Defence spending is

² http://blog.clemmesen.org/2007/04/29/28407-the-mayhem-in-tallinn/

increasing rapidly, albeit from a small base, and there is a clear focus on new nuclear missiles as a vehicle to greatness. Such fundamentals of the post-Cold war order in Europe as the INF- and CFE treaties are now openly challenged by Russia. The West is seen, or at least depicted, as Russia's natural adversary. Zero-sum thinking is pervasive, as it was in the Soviet years, and any gain for the West is seen as Russia's loss, and vice versa. In a similar manner, the Kremlin obviously sees power as the ability kick others around and to make them fear you, as in American gangster films. Any 'disrespect' in the form of challenges by former subjects begets a brutal response, pour encourager les autres. The spectacular murder of Litvinenko should be seen in this light, as should Moscow's blatant overreaction last year to Georgia's arrest of four Russian officers, and this year to Estonia's to relocation of a Red Army monument. The cyber-attack on Estonia that followed was massive and skilfully executed, bringing vital functions of that highly-wired country to a standstill. Whether this should be considered as an 'armed attack' is still an open issue, but hardly the fact that Russia's behaviour gives reason for worry.

Bleak Prospects and a Rerun of the 1970s?

All together, the elements presented above adds to a rather unpalatable cocktail of rising threats to our security, in a wide sense. And we will be facing these as the period of unipolarity, which followed the demise of the USSR, is drawing to a close. America has overstretched itself in Iraq, and has lost the very strong hand it held.

A power as strong as the US was recently can seem as omnipotent and invincible. But when this image is shattered, the reduction in standing and in influence can be dramatic. Losses can also include soft power and attraction, if the dominant power is seen to abuse power and commit acts of savagery. This is happening in Iraq, maybe also in Afghanistan. It has happened before, in Vietnam.

In the early 1960s, the US was not only respected but almost adored in the Western world, American products and American ways of doing things were seen in a very positive light, and emulated. Ten years later, this situation had been overturned, and America withdrew with shame from Vietnam.

Today's situation concerning Iraq has disconcertingly many parallels to Vietnam. Once again, military might and superior technology cannot suppress an insurrection. Once again, losses of own soldiers and the overuse of force against locals and even atrocities (My Lai, Abu Ghraib) delegitimizes the war and the president, and casts a shadow over the

country itself. Once again, the costs of the war drive a budget deficit which threatens the international economic system. Once again, doubts and protests over the war are on the rise in universities, in the press, and in Congress, while domestic support for the war wanes.

Are we facing a rerun of the 1970s? If the US leaves Iraq in circumstances similar to how it left Vietnam, it might very well find itself as it did in the mid- and late 1970s: self-doubting, inward-looking, and unwilling to use force in support of policy. Abroad, the US will not be well seen by many. It will be neither liked nor respected. This would be bad news for America's friends and for those that rely on the US for protection and for upholding the international system. It would, however, be good news for the West's enemies, which would feel triumphant. When the cat is licking its wounds, the rats come out to feast. After the fall of Saigon, the West's enemies moved forward on a lot of fronts: Angola, Iran, Afghanistan, SS-20. But which of the West's adversaries or enemies might do what if Iraq goes as Vietnam? This we cannot know. A Jihadist surge? A Russian bid to extend its power over former subjects? A Chinese decision that this would be the right time to finally settle the matter of Taiwan.....?

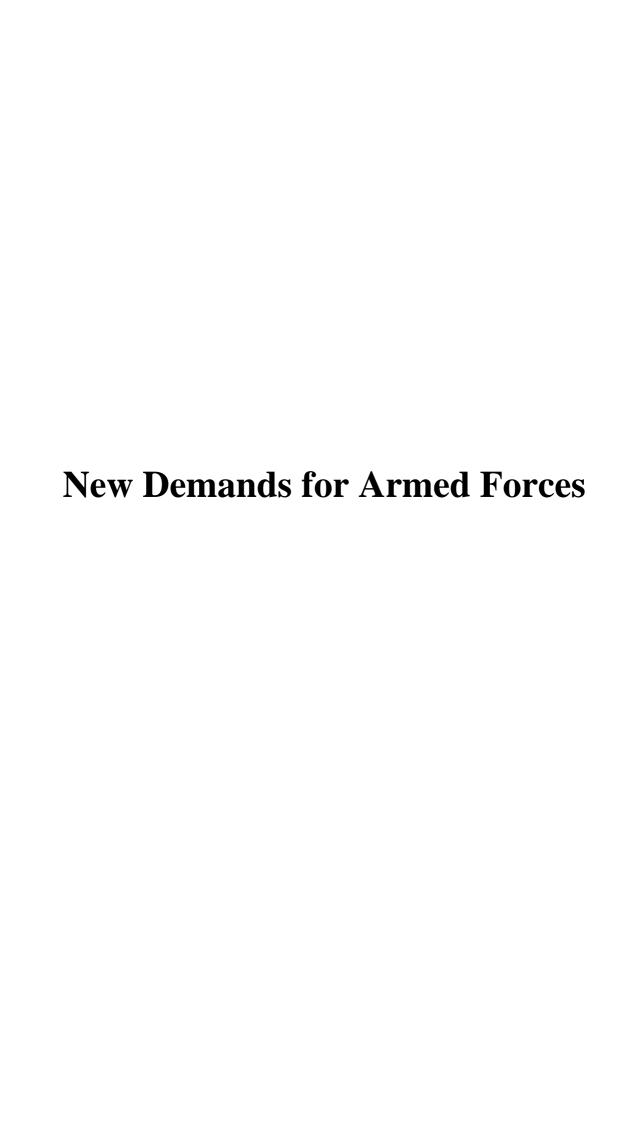
To add an even worse and more urgent prospect, Bush may decide to strike at the Iranian nuclear programme before his time in the White House is up. There are quite a few in the Bush administration who are convinced that Iran's president Ahmadineyad is a new Hitler, bent on the destruction of Israel, and that he must not be allowed to have nuclear weapons. Some also claim that such a strike would be easy to execute, Richard Perle reportedly said that it could be done in one night by a few B-2s. One might hope that the Israeli Air Force's difficulties in silencing Hezbollah's rockets in Lebanon last summer have shown the limits of airpower, and sobered some minds. But the psychology of the gambler – 'I have lost so much, I must play more to win it back' – might cause Bush to overrule his generals. As things are not going well in Iraq, there would be the temptation to 'flee forward' by expanding the conflict to Iran. You might recall that Nixon did this with Laos and Cambodia.

But the results of a strike on Iran would be much more dramatic than those that followed on the bombing of Laos and Cambodia. Iran would of course remove all stops on Iraq, which would go up in full flame. Iran would probably attempt to close the straits of Hormuz, and to sow chaos and discord – perhaps also fighting – in Saudi Arabia. Hezbollah would fire rockets at Israel, which would retaliate, starting a new war. Pro-western Arab regimes would be under siege, and some might fall. The traditional West would be split, but there would be much condemnation of the US. The prices of oil and gas would skyrocket. There would probably also be a lot of turbulence concerning interest rates, currency rates, and stock

markets. And Putin would laugh all the way to the bank, politically as well as economically.

These are not rosy prospects, and the reader may find my message overly alarmist. I hope that I am wrong on these matters, but I fear that we are in for a bumpy ride. While some or even most of the demons I have painted on the wall may fail to appear, it seems prudent to consider how they might affect us and what we could do, if they materialize. We should perhaps also give a thought to which implications these perspectives have for our respective security policies, and for the tasks and resources given to our armed forces.

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New Demands for Armed Forces - Expectations to Military from Civilian Crisis Management

Anu Laamanen Ministry for Foreign Affairs of Finland

The changed nature of conflicts has created a new environment for conflict prevention. Lasting peace is to be built on factors like democracy, good governance, human rights and a sustainable economy. As a consequence, a true challenge for crisis management actors is to develop new crisis management methods. There is a clear need to further develop efficient civilian crisis management capabilities as a complementary element to military means, and vice-versa. As the two have both their own field of competence, the challenge is to create sufficient synergy between them and thus bring added value to crisis management.

The European Union is a unique actor with efficient tools for civilian and military crisis management. The Union has set itself an ambitious goal to further strengthen its capabilities in both fields. Particularly, the numerous ongoing EU civilian crisis management operations around the world symbolise the political will of member states to make the EU a global actor in crisis management.

First of all, to fully support a comprehensive approach in crisis management, the EU has to be able to define clear priorities for its action. The EU has set strategic goals for a comprehensive approach in the European Security Strategy, adopted in 2003, outlining threats such as state failure, organised crime, terrorism, regional conflicts and the weapons of mass destruction. Giving an efficient response to threats like these is not achievable without interaction between civil and military actors. This is clearly the field where the EU leads the way. We also cannot downplay the significance of international cooperation. The United Nations and other organisations have a major role in conducting operations where attention is paid to not only direct military crisis management challenges but also rebuilding different aspects of society.

The interaction between civil and military tools has been more and more visible in recent crisis management operations. But we still need to seek more coherence and also put it in practise. Today there are few crisis areas where the parallel work of civil and military components would not be a necessity, and the tendency is clearly toward more integrated operations. Let us take a look at a few examples of the action the EU has taken with regard to Iraq, Afghanistan, the Western Balkans and the Democratic Republic of Congo.

Although the union is not active in crisis management inside Iraq, the United Nations Security Council Resolution 1511 from 2003, article 16, invites UN member states and international organisations to contribute to the training of Iraqi police and security forces. Following this, the EU started a comprehensive training operation called EUJUST LEX in 2005 for Iraqi Rule of Law officials, judges, the police and penitentiary officials, to be conducted outside Iraq. It has successfully trained several hundred participants in EU member states.

In Afghanistan the EU has launched a civilian crisis management operation in the field of Rule of Law especially assisting and mentoring Afghan police forces. Within ISAF and its Provincial Reconstruction Teams (PRT) we have successfully combined military and civilian action in reforming the Afghan security sector. The EU police mission EUPOL is planned to be supported by logistics and other expertise of the PRTs. Obviously, hazardous conditions in a crisis management environment such as Afghanistan require seamless cooperation.

In Kosovo, the status solution and the establishment of international presence is still pending a UN Security Council resolution. Selected tasks of the UNMIK will be transferred to the EU in the form of an EU civilian crisis management operation in the field of Rule of Law. Effective mechanisms of cooperation must be found between all actors on the ground to find ways to support the creation of sustainable local ownership of all Kosovar institutions.

In Bosnia and Herzegovina, the EU has an autonomous military crisis management operation, EUFOR Althea, supported by NATO. The EU is also conducting a police mission in Bosnia and Herzegovina, the EUPM. Coordinated action has been needed, in particularly in the fight against organised crime. Gradually, military crisis management tasks have been transferred to civilian authorities.

The need for a comprehensive approach and interaction between civilian and military crisis management tools is perfectly illustrated by the concept of the Security Sector Reform (SSR). A good example has been the case of the Democratic Republic of Congo (DRC).

In 2006 during the DRC elections, the EU supported the UN by a military operation and by a strengthened police operation. In the field of security sector reform, the EU is currently conducting two SSR operations in the DRC: EUPOL Congo and EUSEC Congo. Along these operations, support is given to Congolese authorities in the reform of police, the judiciary and the army. As a long term objective in DRC, there is a need for a more comprehensive EU approach in the field of SSR which alongside ESDP

operations takes into account individual efforts of member states and the activities of the Commission. Again, we also have to pay attention to coordination between other international actors in the field of SSR.

Let me now turn to the future. In future crisis management, there is no simple sequencing of military first and civilians later. The EU has made efforts to further develop a comprehensive approach to crises on both conceptual and practical levels: as an example, Security Sector Reform (SSR), Disarmament, Demobilization, Reintegration (DDR), the mainstreaming of human rights' aspects in crisis management and so on. There are already effective approaches in the field by different crisis management actors: Civil-Military Coordination (CMCO), Civil-Military Cooperation (CIMIC), Liaison and Observation Teams (LOT), Provincial Reconstruction Teams (PRT).

In the future, there is a certain need to be able to give an early and rapid response to crises, without forgetting effective means of reconstruction. First of all, a comprehensive approach to crisis requires practical application, like tools for sufficient information exchange. The demands for interaction will most obviously come from the field. But this should also be reflected in the structures. Some streamlining is still welcome, respecting the different mandates, tasks and command structures of civilian and military actors.

Finally, there is always a need for a stable financial basis in crisis management. The EU is an institution being composed of three pillars, as it stands in the Union Treaty. Along with the provisions given by the pillars, there are fundamental financial challenges for being able to find a truly comprehensive approach to crisis management. The amount the CFSP budget allocates for civilian crisis management operations is relatively small compared to assets available for military operations. Here, we could maybe raise the question of how we could create more synergies or even new mechanisms also from this point of view.

In conclusion, in the changing environment of action in crises, there is no going back to separate action by the military or the civilians. The pace of development has been very rapid and the results of combined action have been instantly visible. This is the future of crisis management and it requires a full commitment by all crisis management actors of the international community.

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Military Contribution to Crisis Management

Rear admiral Jørgen Berggrav Norwegian Ministry of Defence¹

Introduction

Most nations' defence structures have been dramatically changed during the last decades. During the Cold War, the Norwegian armed forces were tailored to meet a large invasion force, focusing on holding terrain and vital areas until the country could be reinforces by its NATO allies. The result was a large, but not very sophisticated, army, based on mobilisation. The air force was small (approximately 70 fighter planes) and mainly equipped for air defence. In order to ensure quick effect of the ear marked allied fighter squadrons, the infrastructure of the air force could support some 400 aircraft. The navy focused on protection of the vital sea lines of communication, as well as anti-invasion.

In short, it could be said that the tailoring of the structure was quite effective for the purpose it was created for, but not for very much else.

This has changed dramatically. The downsizing of the forces has turned the no longer needed volume into a much more flexible, capable and deployable capacity, making a much more relevant instrument of today's security policy. And because modern forces with higher readiness are more capable of meeting the unexpected, they are also generally better contributors to complex crisis management than the old structure.

National Priorities

For any country, the design of its armed forces must be rooted in national priorities. For Norway, there are two driving factors. The first is to contribute to common security with our allies and partners by sharing risks and burdens in international operations, requiring enhanced deployability and interoperability, concerning weapons and systems as well as the professional standard of our personnel. The second factor is homeland security, with a specific focus on the situation in the high North. Approximately 25% of the world's oil reserves are located in the Arctic, and some of this is located on the Norwegian continental shelf or close to it. The same area is also one of the most important fishing grounds in Europe. These strategically important resources are one of the reasons why

¹ This article reflects the author's own views and does not represent official views of Norwegian political authorities.

Norway and Russia have not reached an agreement on a maritime border in this area. The climate change may increase the strategic value even more, as the ice melts and opens new areas for navigation and oil exploration. The extreme weather conditions created by the climate change may create increased environmental vulnerability.

The fact that Russia still has large forces based the neighbouring Kola Peninsula, does not by itself pose any threat to Norway. However, in a different political situation, we cannot exclude the possibility that Norway may be exposed to overt or covert military force from someone who wants to achieve political or economic objectives. Consequently, Norway must apply a policy of cooperation with the other "actors" in the area. Russia is especially important in this context. The relation between the two countries is very good, as is the relation between their armed forces. But Norway must also maintain a credible military crisis management capacity. This capacity should be able to deal with small and medium crisis, but more importantly, should a crisis be to much for Norway on her own, we must be able to force an opponent to bear the burden of escalation and face the consequences of that the conflict might not only be limited to a bilateral issue. To enhance allied backing in the north, it is important to be perceived as credible and relevant contributor to common security. The focus on international operations and the security of the High North are therefore two sides of the same coin.

Planning for the Unexpected

The complexity of to-day's security challenges must be incorporated in the planning and design of the armed forces. Therefore, a few but important contingencies can no longer alone dimension the structure. Instead, a wide span of scenarios must be used to check out the flexibility and the capability of the structure. In selecting scenarios, attention should be paid to include scenarios in the cross-over areas between areas of responsibility of other ministries. In the wargaming process, a comprehensive approach must be taking, including no-military expertise when possible.

The recent Norwegian defence reviews have clearly shown that high quality units, available to the operational commander on short notice, outweigh traditional and more numerous forces based on mobilisation.

Crisis, Conflict or Catastrophe?

The capability to meet military aggression is clearly the raison d'etre of armed forces. In the new security situation, this is not likely to be a "black or white" definition, and armed forces should not be limited only to security political crisis. If an "intelligent opponent" plays an active part in a crisis, the responsibility to deal with the conflict lays normally either with the ministry of defence or with ministry of justice (interior), if there is no opponent, another ministry will be responsible for tackling the catastrophe. But a catastrophe might develop into a conflict, or a conflict could turn into a catastrophe. The cross-over potential is plentiful. In my view, it is hard to imagine armed forces as the only tool to manage any crisis. More likely, armed forces must be used as a finely tuned instrument together with other governmental and non-governmental organisations in a comprehensive approach.

The Military Contribution

The most obvious contribution from the military would of course be the use of force against an "official" (state) aggressor, but the responsibility of using force in a terrorist attack on national territory normally rests with the police. However, the nature of asymmetric conflicts tends to blur this division. In order to avoid overlapping structures and waste of resources, the armed forces should be prepared to support the police and other authorities, commanded by the civilian authorities if required. This would improve the sustainability considerably, allowing the police to focus on the extremely important every day work in countering these threats.

This requires a legal platform, and synchronisation of structural planning to avoid overlap and especially to avoid shortfall in the crossover areas. This will without doubt reveal conflict of interests and in particular the "fight for budgets", but must nevertheless be done.

Military units are not only designed to fight, but to deploy and sustain operations out of their normal base area. They are equipped with deployable high quality communication and have unique transport capability on land, including off-road, air and sea. The ability to establish camps and medical facilities in an emergency area will also be vital in a crisis situation.

The interaction between armed forces and other crisis management contributors can not be based on contingency plans alone. The unpredictability of a major crisis requires flexible plans and to a great extent self-synchronisation by the actors themselves. This may be

compared to network-centric approach to military operations. This is only possible by sharing information. To make this doable, the roles and particularities of different "players" must be mutually respected, and a common crisis management information system must be made available to everybody. The system used in the Barents rescue 2005, consisting of a self-explanatory message handling and situation display system based on the internet, is a good example. The system could be made available to "anybody" by allocating username and passwords.

Mutual understanding of roles, procedures and respect is a prerequisite for net-working. Consequently, the crossover areas should be exercised frequently, both by synchronising exercises within the different areas of responsibility, but also on the local and regional level.

Complicating Issues

The tightly knitted civilian – military operations is not without complications. Non-governmental organisations will often prefer to act independently and normally take care not to be associated with military operations. This is a question of principle as well as to ensure "neutrality". This may be particularly important in international crisis management.

The traditional approach to use of military force as defence against external aggression, contradicts the use of military assets "against" the nations own citizens. Historical examples of military or paramilitary forces not only in countries with a military "junta" leadership, but also in the Nordic countries in the 1930-ies have shown that care must be taken. However, it is vital that fear of the uncertainties of the cross-over area between police matters and military must not leave areas without leadership, leaving vulnerable spots. Such weak spots will not only be hard to manage in a crisis, but even worse, they may be exploited by an "intelligent" opponent in a conflict-crisis scenario. There is no "facit" to this problem, but hopefully it can be reduced by openly discussing the issue, establish routines and procedures and frequent exercises.

One should be careful not to view military forces as a universal remedy for resolving crisis. Military units are, and should be designed and trained to deal with (and survive) high intensity warfare situations. To maintain large volume military forces as "nice to have" in crisis situations is neither practical nor economical wise. The volume, counted by "body weight" can be produce much more efficiently as a civilian force. The military must be measured by their quality, using the capabilities built in by their primary function.

Avoiding the Shortfalls of Stove-pipe Thinking

The un-predictable cross-over areas in complex crises is a major challenge in itself. Most countries have organised the assets likely to be used in crisis management under different ministries and agencies, and resources, training and loyalty follows the "chain of command". This may have negative consequences that should be compensated for.

A crisis is likely to cover the areas of responsibility of several ministries and organisations, probably with varying intensity and focus from the actors. At a certain stage, the main focus could be on stabilizing a security challenge by use of force from police and/or military units, in another stage on search and rescue, environment and so on. It is hard to imagine that it will be possible to identify one ministry or organisation as the natural "owner" of the crisis for the entire duration. To change the "ownership" (once or more) during the crisis, is likely to result in reduced effect in the handover period. But the activities of all the contributors, such as police, health care assets, environmental protection units, search and rescue assets, armed forces, transportation units and not to forget several nongovernmental organisations, must be coordinated and synchronised during the entire crisis. If not, they will be less effective and perhaps sometimes counter-productive if the activities are at least not deconflicted. This calls for a pre-designated command and control facility, capable of providing the person in charge with multi-sector situation awareness and sufficient communication capacity, as well as having a robust organisation with experienced operators.

The command and control facility should not be "sleeping", but ready for action. It should be running 24/7 and operate and command units on a regular basis. A military headquarters is also one of the few facilities able to deal with all kinds of sensitive information. This is a very similar task to command a military operation. Instead of reproducing the command and control facilities normally inherent in a joint military headquarters, it is my personal view that the military HQ should be adjusted to this role. Facilitating the possibility of a civilian "commander", as well as creating working spaces for other agencies, should be a part of this adjustment.

Defining the Crisis

The ability to maintain cross sector situation awareness in one joint headquarters, will also assist in defining a crisis situation, i.e., when the situation deviates from normal. If the situation is only monitored be each sector separately, the situation might not appear as seriously as if several

sectors are viewed comprehensively. This is important, as rapid reaction is vital to contain any crisis or catastrophe.

Leadership

Managing an unknown crisis requires the ability to walk unknown paths, and the courage to cross defined borders of responsibility when necessary. The leader must be willing to short circuit the bureaucracy if needed. Sometimes he must take command of relevant resources outside of his normal reach, but be open-minded and willing to place the resources at the disposal of the appropriate authority when the situations normalises.

The leader who "plays safe" within his own area of authority is, as I see it, not likely to succeed. The leader in any crisis situation must be prepared to face criticism in order to reach the objectives of the operation. This calls for courageous leaders, exercising leadership, and not for managers and administrators. This might require other persons than the modern business-administrative executives often found in modern societies. Potential crisis management leaders should be well prepared for their responsibilities, focusing on crisis management, exercising a variety of scenarios, and "dreaming about crisis management by night".

Conclusion

After the cold war, the security challenges to modern societies constitute no longer a clear black-and-white picture, with well-defined friends and foes, represented by states only. Now, the picture has changed to look more that of a modernistic colourful painting. In facing crisis situations, domestically or internationally, the national resources must be applied in a comprehensive approach.

Modern armed forces are valuable contributors in managing sector overarching crisis. Military personnel are operationally focused and have in addition to the ability to use force, transportation assets, deployable medical facilities and command, control and communication capabilities. To ensure the best possible result of the comprehensive approach, it is vital that sector over-arching crisis management is exercised frequently. This is not only the best way of testing out equipment and procedures, but absolutely vital to create respect and trust between different contributors in crisis management operations. This is vital to exploit the possibilities of a network centric approach, which in my mind clearly is the most effective in complicated situations.

Any situation characterised by "the fog of war (crisis)" require strong leadership and courage to short-circuit the bureaucracy when need. Both civilian and military leaders should be selected and trained to face such challenges.

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Aspects of Supply – Resources and Practices

Soldiers as State-Builders: The Danish Experience¹

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Military Intervention and State-building: Competing for Local Hearts and Minds

Economic reconstruction and institution building have long been recognised as key ingredients in sustainable conflict resolution. Yet, within the broader context of the US-led "war on terrorism", stable and functioning states, which are believed less likely to deliver recruits to the al-Qaeda movement or lend their territories to training activities, are now perceived as a key security interest for Western countries. Despite differences in mandate, participants, international legitimacy, level of ambition and so on, both Iraq and Afghanistan (and Kosovo) are state-building missions aiming at stable, democratic, moderately religious states living in peace with their surroundings.³

In state-building missions, success hinges on whether local populations eventually turn their expectations and ultimately their loyalty towards the new democratic political structures, instead of towards sectarian militias, insurgent movements, or local warlords. Thus, the hearts and minds of local populations become the mission's "centre of gravity." There is a scarcity of empirically based knowledge about what it requires to win and hold on to local hearts and minds in today's conflict and post-conflict mission areas. Most analyses refer either to common sense, or rely on historical analogy. British counter-insurgency experience from the 20th century, for example, indicates that winning hearts and minds, where these are fiercely contested, depends on providing security from, but also political and economic alternatives to, sectarian militias, insurgent

² Chau, Donovan C. 2006. Political Warfare – An Essential Instrument of U.S. Grand Strategy. Comparative Strategy vol 25: 109. For a critical appraisal see Menkhaus, Ken. 2003. The Security Paradox of Failed States. National Strategy Forum Review vol. 12, 3: p. 3.

¹ This article is an extract from the study report: Soldiers and state-building: The approach of the Danish armed forces to reconstruction support by Anja Dalgaard-Nielsen. Published in DIIS REPORT 2007:2. The research is based amongst others on "embedded research" with Danish units in the field.

³ As outlined in the following UN Security Council Resolutions: Regarding Iraq: S/RES/ 1483: 1, S/RES/1546: 3, S/RES/1483: 1. Regarding Kosovo: S/RES/1244: 3. Regarding Afghanistan: A/RES/56/200: 2, S/2001/1154: 2. Available on http://www.un.org/documents/ (accessed on January 23, 2007).

⁴ For a discussion of old and new challenges in today's counterinsurgency operations see Mackinlay, John. 2005. Defeating Complex Insurgency. Beyond Iraq and Afghanistan. Whitehall Paper 64. London: United Royal Services Institute.

movements, criminal networks, and local warlords. Moreover, effective military stabilisation, in itself, requires a reconstruction effort. Militias, insurgent movements, and criminal networks will always be able to find new recruits unless political and economic alternatives are provided.⁵

One of the few interview-based studies, mapping the expectations and perceptions of local communities in conflict areas, support these notions. The results indicate that local populations frequently meet an intervening force with friendly or neutral attitudes. Perceptions then develop based on two major issues – negative peace in the sense of an absence of direct fighting, and positive peace, comprising reconstruction, jobs, and improvements in daily life. Negative peace is important. However, it seems the attention of local populations shifts towards positive peace very quickly after the end of major fighting operations.

In summary, security is a necessary but insufficient precondition for winning hearts and minds. It has to be combined with a quick and visible effort to improve daily life and political opportunities in the conflict zone to reduce the pull of criminal networks and insurgent groups. In other words, security, democratic governance and economic development are interconnected and must be pursued simultaneously, not sequentially. However, as dramatically highlighted by the bombing in August 2003 of the UN headquarter in Baghdad, civilian organisations and agencies have increasingly become direct targets in conflict areas around the world. In Iraq and parts of Afghanistan, security reasons have forced a withdrawal of

⁵ Celeski, Joseph D. 2005. Operationalizing COIN. JSOU Report 05-2. Hurlburt Field, Florida: Joint Special Operations University; Cordesman, Anthony H. 2006. The Importance of Building Local Capabilities: Lessons from the Counterinsurgency in Iraq. Washington D.C.: Center for Strategic and International Studies; White House. 2005. National Strategy for Victory in Iraq. Washington D.C.: White House; Eide, Espen Barth, Anja Therese Kaspersen, Randolph Kent, Karin von Hippel. 2005. Report on Integrated Missions. Practical Perspectives and Recommendations. Independent Study for the Expanded UN ECHA Core Group; Metz, Steven, Raymond Millen. 2004. Insurgency and Counterinsurgency in the 21st Century: Reconceptionalizing Threat and Response. Strategic Studies Institute; Mockatitis, Thomas R. 1995. British counterinsurgency in the post-imperial era. Manchester: Manchester University Press: p. 146.

⁶ Donini, Antonio, Larry Minear, Ian Millie, Ted van Baarda, Anthony C. Welch. 2005. Mapping the Security Environment. Understanding the perceptions of local communities, peace support operations, and assistance agencies. Medford MA: Feinstein International Famine Center: 61.

⁷ Further emphasising the need to seize the initiative and act quickly is the fact that spoilers such as insurgents and militias are likely to be unorganised in the immediate wake of a military intervention. Dobbins, James. 2006. Preparing for Nation-Building. Survival vol 48, no. 3: 38; Mackinlay, John. 2005. Defeating Complex Insurgency. Beyond Iraq and Afghanistan. Whitehall Paper 64. London: United Royal Services Institute.

civilian agencies from large areas. To fill the resulting gap, western policy-makers have turned to the armed forces.⁸

Currently, US, British, French, and Danish doctrines and directives all acknowledge that under certain circumstances, soldiers might have to provide humanitarian aid, secure law and order, engage in reconstruction, and/or substitute for the civilian administration of a failed state. Military training centres and units focussing on Civil-Military Cooperation (CIMIC) have sprung up in a number of Western countries. Reconstruction support units and civil advisers are now part of the force contributions of a number of countries in Iraq and Afghanistan. On the surface, the armed forces seem to have made a substantial effort to integrate various aspects of state-building, in particular reconstruction support, with military efforts.⁹

Some scholars, however, have suggested that this effort is more symbolic than real. Political pressure, they argue, have forced an adjustment in doctrines and directives, but in reality the armed forces continue to give priority to more traditional and directly security related tasks. They point out how the easy victory in the first Gulf War in 1991 confirmed Western militaries in their Cold War focus on major conventional battles, that is, on the operational level of war, reinforcing a disregard of the counterinsurgency lessons of the European de-colonisation wars and the US

⁸ For attacks on civilian organisations, see Dobbins, James, Seth G. Jones, Keith Crane, Andrew Rathmell, Brett Steele, Richard Teltschik, Anga Timilsina. 2005. The UN's Role in Nation-Building. From the Congo to Iraq. Santa Monica: RAND: 189 and 199; Report of the Independent Panel on the Safety and Security of UN Personnel in Iraq. 2003. 20 October; Donini, Antonio, Larry Minear, Ian Millie, Ted van Baarda, Anthony C. Welch. 2005. Mapping the Security Environment. Understanding the perceptions of local communities, peace support operations, and assistance agencies. Medford MA: Feinstein International Famine Center: 15; Implementation of the Afghanistan Compact. Bi-Annual JCMB Report. 2006. Kabul, 12 November: 2; Author's interviews, Basra Palace, April 2006. For political pressure, see Veicherts, Nicolas T. 2005. Hvorfor samtænkning af militær og civil indsats er kommet for at blive. DIIS Brief. Copenhagen: Danish Institute for International Studies; Veicherts, Nicolas T. 2005. Hvorfor samtænkning af militær og civil indsats er nødvendig i felten. DIIS Brief. Copenhagen: Danish Institute for International Studies; Veicherts, Nicolas T. 2006. Samtænkninng – modstand og muligheder. DIIS Report 2006:5.Brief. Copenhagen: Danish Institute for International Studies. See also Zaalberg, Thijs W. Brocades. 2006. Soldiers and Civil Power. Supporting or Substituting Civil Institutions in Modern Peace Operations. Amsterdam: Amsterdam University Press.

⁹ Ministry of Defence. 2006. The Comprehensive Approach. Joint Discussion Note 4/05. UK: Swindon: 1-5 and 3-4; Ministry of Defence. 2006. Joint Doctrine Publication 3-90. Civil-Military Co-Operation. UK: Swindon: 1-2. The German doctrine is more timid and only endorses the occasional need for soldiers to take on humanitarian tasks, not law and order or institution-building tasks. Ministry of Defence. 2003. Defence Policy Guidelines. Germany: Berlin. The French doctrine places particular emphasis on building the capacity of local actors to reassert control. Ministry of Defence. 2005. The French armed forces and Civil-Military Cooperation: 5.

experience in Vietnam. Moreover, it is claimed, the perceived failure of the UN mission UNOSOM II in Somalia and the drawn-out engagements in ex-Yugoslavia, on the other hand, presumably led particularly the US military to pull back from "nation-building" to focus on more narrowly defined military tasks. ¹⁰

In summary, within the broader context of the US-led "war on terrorism", military interventions increasingly aim at building stable and functioning states. Civilian tasks like reconstruction and institution building are crucial in progressing towards this end-state and, to some extent, hinge on the armed forces. The need to facilitate or directly engage in these tasks now figure more or less explicitly in military directives and doctrines on both sides of the Atlantic, including in Denmark, as explained below.

Denmark: the Coordinated Planning and Action Initiative

The Concerted Planning and Action initiative (CPA) was launched in a common document from the Danish Ministry of Defence and Ministry of Foreign Affairs in 2004. While the document offers no clear-cut definition of CPA, the key notion is clear: if Danish military and development efforts in a crisis area are coordinated, resources can be mobilised faster, and synergies will result. This will accelerate military stabilisation and the establishment of a functioning state. It is underlined that humanitarian and reconstruction tasks do not belong to the core task and core competencies of the armed forces and should normally be carried out by civilian relief organisations. However, if the security situation precludes civilian actors from operating, the document states, the armed forces should step in to support and facilitate reconstruction work.

Dalgaard-Nielsen, Anja. 2006. Germany, pacifism and peace-enforcement. Manchester: Manchester University Press, pp. 105-107; Dobbins, James. 2006. Preparing for Nation-Building. Survival vol 48, no. 3: 28; Nash, Bill, John Hillen. Debate: Can soldiers be peacekeepers and warriors. 2001. NATO Review; Gordon, Stuart. 2006. The changing role of the military in assistance strategies. In Resetting the rules of engagement. Trends and issues in military-humanitarian relations, eds. Victoria Wheeler and Adele Harmer. HPG Research Report 21.London, p. 40; Strachan, Hew. 2006. Making Strategy: Civil-Military Relations after Iraq. Survival, vol. 48, no. 3: 60.

Ministry of Foreign Affairs, Ministry of Defence. 2005. Samtænkning af civil og militær indsats i internationale operationer, annex to Defence Agreement 2005-2009; Speech by Minister of Defence Søren Gade. 2005. Concerted Planning and Action of Civil and Military Activities in International Operations. NATO Seminar on CPA. Copenhagen, June 20.

Ministry of Foreign Affairs, Ministry of Defence. 2005. Samtænkning af civil og militær indsats i internationale operationer, annex to Defence Agreement 2005-2009. Copenhagen: Ministry of Defence; Forsvarskommandoen. 2005. Forsvarets civilt-

According to guidelines issued by the two ministries, CPA projects are intended to meet elementary humanitarian needs, assist vulnerable and excluded groups, produce visible results in terms of material assistance to local populations, assist the (re-)establishment of the local administration, and promote the legal security of individuals and groups.¹³

CPA funds have been funnelled to units in the Basra province, Iraq and in the provinces of Badakshan and Helmand, Afghanistan. ¹⁴ In Afghanistan, CIMIC units, in cooperation with a civil adviser employed by the Danish Ministry of Foreign Affairs, are responsible for CPA activities. In Iraq a special 12-person unit, Reconstruction Unit Denmark (RUD), has been established and dedicated to CPA projects. RUD is supervised and assisted by a civilian adviser and the CIMIC section of DBG headquarters, and consists of a mixture of reserve and line personnel. In both Iraq and Afghanistan regular unit provide security to RUD/CIMIC, which typically operate in teams of two: one officer and one warrant officer. ¹⁵

In terms of the immediate physical results, CPA and traditional CIMIC projects carried out by the armed forces might differ little. Both focus on relatively minor infrastructure improvements, health, water, and education. The two types of projects, however, differ in terms of funding, purpose, and presumably, longer-term results. CIMIC projects are funded via the defence budget, and are undertaken to support the mission, win consent and contribute to force protection. They are typically quick impact projects, not necessarily focussing on long-term sustainability or local involvement. CPA projects, in contrast, are funded by the Ministry of Foreign Affairs and are, according to the CPA guidelines, supposed to assist vulnerable groups and contribute towards strengthening the local administration. To put it simply, when the armed forces do CIMIC projects they do it to help themselves. The time perspective is likely to be short. While CIMIC

militære samarbejde (CIMIC) og forsvarets relation til "samtænkningsinitiativet" FKODIR PL.190-1.

¹³ Ministry of Foreign Affairs, Ministry of Defence. 2005. Retningslinier for militært-civilt samarbejde ved humanitære og genopbygningsindsatser finansieret af Udenrigsministeriet. Denmark: Copenhagen.

¹⁴ The Danish force contribution in Basra consists of a battalion size battle group (Danish Battle Group, DBG). 290 soldiers are deployed to the Helmand province and a contingent of 41 soldiers form part of a German Provincial Reconstruction Team in Badakshan.

¹⁵ The civil adviser has either a technical or a development background, is working from within the deployed headquarters, and liaises closely with the CIMIC section, while advising the operative units. The Danish Battalion in Iraq also supports a group of civil advisers employed by the Danish Ministry of Foreign Affairs at Basra Palace Camp – the so-called Steering Unit – responsible for longer-term reconstruction projects. RUD units support the Steering Unit with some aspects of project identification, data collection, and monitoring while regular units support with transportation and security.

projects might have a positive impact over the longer term, the immediate impact on hearts and minds is the primary aim. CPA projects, in contrast, might have a positive and immediate impact on political and social support, but local needs, not the needs of the deployed soldiers, should guide the selection and implementation of projects.

The Approach of the Danish Armed Forces to CPA

Since the launch of CPA, RUD/CIMIC units have facilitated a range of health, education, and infrastructure projects. Clean drinking water has been provided to remote villages. Schools have been enlarged and improved. Health clinics have been build or improved, and minor local infrastructure improvements such as bridge constructions or repair have been carried out. Four staff officers, a civil adviser, and the 12-member RUD unit facilitated 33 such projects in the Basra province in less than a year (from mid-2005 to April 2006). Four CIMIC officers, assisted by a civil adviser, facilitated 28 projects in the Badakshan province between May 2005 and June 2006. ¹⁶

It is frequently assumed that RUD/CIMIC does the actual reconstruction work. This is not the case. Whenever possible, local contractors are hired. Moreover, as also frequently assumed, the soldiers do not impose specific projects from the outside based on a well-meaning but possibly misguided conception of locals need. On the contrary, RUD or CIMIC teams liaise with local authorities and community leaders to identify potential projects. In practice, local councils (Iraq) or village elders (Afghanistan) are requested to draw up a prioritised list of their needs. Based on this list, projects are identified. A local entrepreneur is then hired through a tendering process, anchored in the local council, but overseen by RUD/CIMIC, which also monitors the actual construction work, and is in charge of financial management and final approval. The project cycle concludes with a formal hand-over to representatives of the local councils.¹⁷

¹⁶ RUD. 2006. RUD projektoversigt uge 15. Iraq: Camp Danevang. Since the launch of the initiative in 2003 Danish units in Iraq have facilitated projects of a value of about 13 mill. DKK. In Afghanistan CPA projects are funded via the overall Danish allocation for reconstruction and humanitarian assistance to Afghanistan. From May 2005 to June 2006 about 1 mill. DKK were allocated to CPA projects supported by the Danish armed forces. For further details see Danida. 2006. Desk Review of Civil-Military Activities in Iraq Financed by the Danish Ministry of Foreign Affairs. Final Report. COWI Consult; Danida. 2006. Review of Civil-Military Activities in Afghanistan Financed by the Danish Ministry of Foreign Affairs. Final Report. COWI Consult.

¹⁷ The tendering procedure was not used in Badakshan where CIMIC instead relied mainly on one trusted local entrepreneur. Whereas this practice was clearly less in line with CPA guidelines than the practice followed in Iraq, it might be in part justifiable

Challenges Encountered by RUD/CIMIC Units

The Concerted Planning and Action initiative enjoys a high level of national political attention. The Danish Prime Minister and the Minister of Defence have gone to great lengths to impress the importance and priority of the initiative upon the armed forces. Attempts have also been made to launch the concept internationally. However, as suggested by some analysts, there are indications that the armed forces have accepted to support civil reconstruction more in name than in reality. Although many Danish officers, at least in words, embraced CPA, RUD/CIMIC units appeared relatively neglected by the planning and support system as well as by some commanders on the ground. RUD/CIMIC work suffered from a lack of strategic planning, specialised training and education, proper systems for capturing and transmitting lessons learned, and problems getting access to resources such as security escorts.

This section discusses the major challenges encountered by RUD/CIMIC units and shows how they nevertheless performed well. It uses Edgar H. Schein's concept of culture and illustrates how the composite nature of the culture of Danish armed forces help make sense of the otherwise puzzling combination of low priority/high performance of RUD/CIMIC units.

Strategic Planning

"Not coordinated and not part of an overall plan." This is how one RUD officer described CPA, looking back at his six-month tour. ²⁰ The perceived absence of strategic guidance emerged again and again as a source of

due to the weakness of local governance structures and the existence of far fewer local entrepreneurs. Also with regard to the hand-over, the practice varied between Iraq and Afghanistan. Hand over was at times less formal in Afghanistan, where many projects were smaller than in Iraq.

¹⁸ Danish Ministry of Foreign Affairs, Danish Ministry of Defence. 2005. Seminar in Copenhagen 20 and 21 June 2005 on concerted planning and action of civil and military activities in international operations. Program and Chairmen's report; Speech by Prime Minister Anders Fogh Rasmussen, Danish Defence Academy, 1. November 2006.

¹⁹ See Edgar H. Schein. 2004. Organizational Culture and Leadership. San Francisco: Jossey-Bass.

Author's interviews, Camp Danevang, April 2006; Danida. 2006. Desk Review of Civil-Military Activities in Iraq Financed by the Danish Ministry of Foreign Affairs. Final Report. COWI Consult: 34-35. Arguably, this compromised the efforts in a number of ways. Even when units for example took care to work through local structures, the needs of marginalised groups or groups not favoured by local councils and village elders are, of course, not necessarily accommodated by the projects. Djurhuus, Johanne. 2006. Hjertesuk fra Basra. Politiken. 15. March.

frustration in interviews with RUD/CIMIC officers. Indeed, by mid-2006, this author was unable to locate an overall CPA strategy to give direction to the efforts of individual RUD/CIMIC teams in terms of needs in their specific area, strategic goal, operational goals, and sector focus. The deployed civil advisers were praised on a number of accounts, but contributed mainly technical advice, project management expertise, cultural insights and, in the case of one adviser, political advice. The "higher levels" at home (the military commands) were seen as excessively focussed on monitoring and managing the micro level of CPA – the number of security escorts, the possibility of accommodating civilians in the military camps and so on, instead of providing strategic guidance.²¹

Ideally, CPA, like other aspects of a deployed unit's efforts, should be guided by a strategic plan, spanning more than just one rotation. Such a plan would depart from an assessment of the situation and the needs within the area of responsibility, and be guided by a clear strategic objective, a definition of the overall aim and intended impact of the efforts. Operational goals (short-term and medium-term goals) should be derived from the strategic goal. Indicators for measuring progress should be explained and applied.²² Such a strategy would provide continuity beyond the six-month tour of each individual rotation, and guide deployed units as to what geographical areas, sectors, and project types to focus on. The main responsibility for forging such a strategy would appear to lie with the Ministry of Foreign Affairs, which has the necessary development expertise. Whether the failure to provide such a strategy should be ascribed to the fact that CPA is still relatively new, to work pressure, or to a lack of willingness to wholeheartedly support CPA, is a discussion which is beyond the scope of this report.

With the absence of an overall strategy, each new commander and RUD/CIMIC team has been largely free to shape the implementation of CPA on the ground. In principle, sector focus, priorities, and operational success criteria may thus change every six months, compromising the coherence and overall impact of the effort.²³

²¹ Author's interviews, Camp Danevang, Basra Palace, and PRT Feyzabad, April, May, and June 2006.

²² Baylis, John, James Wirtz, Eliot Cohen, Colin S. Gray. 2002. Strategy in the Contemporary World. An Introduction to Strategic Studies. Oxford: Oxford University Press: 4; Nastsios, Andrew W. 2005. The nine principles of reconstruction and development. Parameters, autumn: 10.

²³ Whereas some commander for example evaluated success in terms of the number of projects others have measured it in terms of the number of security escorts carried out for RUD or civil actors affiliated with the Ministry of Foreign Affairs.

In this respect, Denmark differs little from allied nations. The British Brigade, responsible for the southern part of Iraq, including the Danish area of responsibility, apparently attempted to provide some coherence to the work of the different national CIMIC contingents by directing projects towards specific sectors: electricity, health, or water. However, priorities tended to shift as brigades rotated in and out. Obviously, the fact that Danish units always and inevitably form part of larger coalitions demands that an effective contextual CPA strategy has to take the coalition element into account. Effective solutions to the lack of coherence ultimately have to be sought at NATO or coalition level. Meanwhile, however, an applied national CPA strategy would increase the effectiveness of Danish efforts, and as well as making easier the international sale of the CPA idea.

Assignment, Training, and Specialisation

The vast majority of the RUD/CIMIC personnel interviewed for this study had no prior experience with project work or civil-military liaison. Only half-jokingly, many characterised their assignment as guided by the "halløjsa" principle – roughly translated, the hit-and-miss principle. Rarely did previous experience and expertise point towards a RUD/CIMIC job. 24 Short and intense training is intended to brief the personnel assigned prior to deployment. Staff and officers assigned CPA tasks receive two weeks of specialised CIMIC/CPA training in Denmark and the Netherlands, focussing on context, concepts, and challenges, and how to carry out liaison and project work. Operative units cover many similar aspects, but with a more hands-on focus, using case-studies and practical exercises.

The assessment of whether this training provided proper preparation was mixed. Some officers felt hampered by a lack of local knowledge. Others emphasised how many of the skills conveyed in the general Danish officers' training: communication and contact skills, were useful, and generally felt well-prepared for the job. This author attended part of the pre-deployment training of both staff and operative RUD/CIMIC units. Even if parts were rushed, not permitting in-depth exploration, case studies and scenarios were used effectively and appeared to prepare the assigned units reasonably well to address the challenges of project work in the deployment areas.

²⁴ Author's interviews, Garrison of Holstebro, February 2006, Camp Novo Selo, March 2006, Camp Olaf Rye, Camp Danevang, April 2006, PRT Feyzabad, May 2006.

Author's interviews, Garrison of Holstebro, February 2006, Camp Novo Selo and Camp Olaf Rye, March 2006; Camp Danevang, April 2006; PRT Feyzabad, May 2006.

However, accentuating the challenge of quickly conveying new skills to personnel with no prior experience, trainers had difficulty getting personnel appointed in time for the start of the training course. Also, getting access to the necessary equipment apparently posed problems.²⁶ Moreover, although the project management aspects of CPA were covered reasonably well during the training, the personnel assigned were insufficiently prepared for the capacity building aspect of CPA – the requirement that CPA should aid in the (re-) establishment of a local administration. These aspects were not covered in pre-deployment training. Again, the assessment of the officers and soldiers themselves was mixed. Whereas some members of RUD/CIMIC claimed that common sense and even the most basic knowledge of local Danish democratic structures went a long way, others noted that young Danish officers did not have the knowledge and authority to coach Iragi council members in the procedural and democratic aspects of their work. As was the case for CPA as such, many were critical of what they saw as the absence of a strategy and clear operational goals for capacity building. A common sentiment was that "we have been told to build capacity, but not how to do it." Again, the author is not aware of the existence of strategic CPA guidance on this aspect.²⁷

In contrast to the Danish system, countries like France and Germany established specialised and standing CIMIC units as the perceived importance of CIMIC grew over the 1990s. France has a CIMIC Company in Lyon, and Germany has a (battalion-sized) CIMIC unit in Nienburg (CIMIC Centrum Nienburg). These units are partly operational, partly training and education centres, responsible for pre-deployment training of tactical-level CIMIC personnel. Staff assigned to the French or German centre typically serves three to four years in these units. Although not all deployed CIMIC personnel are drawn from these units, some are and these bring a significant experience to the job.²⁸

The Danish CIMIC unit does not comprise any standing operative units. With only a few full-time staff, it is fully occupied with education and training. An expansion of this unit has been resisted with arguments such as "Denmark is too small for this kind of specialisation" and "any good officer of the line can do CIMIC." The Danish culture of dialogue, the communicative and interpersonal skills of Danish officers, the argument goes, permits them to engage in CIMIC tasks without additional training.²⁹

²⁶ Author's interviews and observations, Oksboel and Garrison of Hoevelte, January and February 2006.

²⁷ Author's interview, Camp Danevang, April 2006.

²⁸ Author's interviews, Camp Novo Selo, March 2006; Field Camp Prizren, March 2006.

²⁹ Author's interview, Camp Olaf Rye and KFOR Headquarters, March 2006; PRT Feyzabad, May 2006.

Whereas the latter might well be true, it is also the case that the German CIMIC units joined by the researcher displayed superior communication, negotiation, and psychological skills vis-à-vis local leaders and locally hired entrepreneurs. Experience arguably makes a difference.³⁰

Capturing and Transmitting Lessons Learned

As a rule, Danish soldiers serve a six-month tour in international missions, and the entire contingent in any given deployment area is thus replaced every six-months. As mentioned, civil advisers span more than one rotation and thus provide for some continuity. Moreover, members of previous RUD/CIMIC teams are involved in the pre-deployment training of new teams, which also overlap with their predecessors in the field for two to six days. This transfer period, however, is described as extremely hectic and very short for transferring knowledge, contacts, and concrete projects.³¹

Civilian development professionals with a time perspective of more than one military rotation emphasised how many lessons apparently had to be relearned because they were lost between rotations. At the same time, however, members of RUD/CIMIC described how reporting back to the Army Operational Command in Denmark was extremely time-consuming and detail-oriented. The reporting requirement is one more illustration of how strategic issues are lost sight of amid details and short-term practical issues.³² Acting on frustration due to a perceived lack of overview of past and present CPA activities, members of an RUD unit deployed to Iraq in autumn 2005 took the initiative to establish a database, recording practical and technical information about the sponsored projects.³³

³⁰ Author's observations, Kosovo, March 2006 and Afghanistan, May 2006. See list of patrols and meetings attended at the end of this document. Danish CIMIC/RUD units are in other ways better supported than German units – German units typically lack funding for anything beyond very small quick impact projects and need to apply for funds with potential donors at home every time a potential project has been identified.

³¹ An inherent challenge is that effective liaison and project work to a large extent build on trust between local actors and the soldiers. Trust takes time to build and is difficult to transfer. Author's interviews, Camp Danevang, April 2006.

³² Author's interviews, Camp Danevang, April 2006, PRT Feyzabad, May 2006.

The absence of effective systems for collecting and transferring lessons learned was also encountered in connection with other "non-traditional" areas such as psychological operations and press and information activity (P&I). For example, one P&I officer in an established mission where the Danish presence was already year-long found no recorded information from previous P&I officers about their experience with local media and journalists, how to approach them, the level of independence and objectivity of different media etc.

The problem of loosing too many lessons between rotations is broadly recognised. Some countries, for example Canada, address the problem by operating with staggered rotation of CIMIC units: Only half the team rotate at any one time, ensuring that experienced members always overlap with new ones.³⁴ Others, like Germany and France, have created institutional anchors for accumulation of expertise with their CIMIC units. Danish CIMIC/RUD personnel, in contrast, typically have no prior experience of project work, and therefore not only need to get acquainted with a new geographic area, but also with a new function.³⁵

In Denmark, each deployed team does an end-of-tour-report. This report, however, mainly focuses on practical and technical issues. A system for monitoring and analysing impact, and capturing and transmitting CPA lessons learned over the longer term is lacking, both in Iraq and in Afghanistan. Who benefits? Are projects sustainable? How does one prevent the projects becoming targets of anti-coalition forces? How does one maximise the transfer of skills to local actors? Is there an impact on security in the medium-term? What is the impact on local perceptions of the local/national administration and of the international forces (and thus presumably on force protection)? These are questions of crucial importance to mission success. Within the current system, however, it is quite likely that many of these questions are never asked, that some answers are lost between rotations, and that others are never found because they emerge only when trends and issues are analysed over the longer-term.³⁶

Access to Security Escorts

RUD/CIMIC typically operates in teams of two soldiers. Regular forces provide security. Thus, in order to move around, attend meetings, monitor project work and so on, RUD/CIMIC depends on access to security escorts. In areas with a relatively benign security environment, getting the necessary (and typically smaller) escorts has not posed any problems. However, in areas with a more hostile environment, with more focus on force protection and the demand for a larger security escort, RUD/CIMIC had, at times, difficulty asserting its need for escorts. In Iraq, for instance, some RUD teams experienced periods where they were largely confined to

³⁴ Peabody, David. 2005. The Challenges of Doing Good Work: The Development of Canadian Forces CIMIC. Paper Submitted for the CDAI Conference: 10.

³⁵ The same is true for soldiers assigned to other "non-traditional" areas. Unlike in bigger countries, Denmark has no special psychological operations unit or P&I unit. Danish officers are thus not specialising in these tasks and typically have no prior experience with them.

³⁶ Author's interviews and observations, Camp Olaf Rye, March 2006; Camp Danevang, April 2006.

camp. In reaction to this problem, in early 2006, it was decided to dedicate a platoon from the Danish Battle Group in Iraq to RUD escorts.³⁷ Yet, even after the designation of a "RUD protection unit" a number of requested and planned escorts were still cancelled. The problem is probably larger than that which appears at first sight. Interviews indicated that RUD personnel would at times refrain from even requesting escorts in order not to strain the Battle Group further.³⁸

A related issue raised in the interviews was the amount of attention paid by commanding officers to the work of RUD/CIMIC units. Many expressed frustration at the perceived lack of interest in their efforts, and complained of difficulties "getting attention and being taken seriously." Some interviewees claimed that commanders hardly ever took time to visit CPA projects, except in connection with VIP visits from home. There were dissenting voices, however, who insisted that when explained properly and pushed energetically, attention and resources, such as security escorts, came forward. Typically, such assertions came from ambitious and articulate officers of the line, assigned to CIMIC functions. The author encountered no instances of a commander joining a RUD/CIMIC team on monitoring visits, meetings, or hand-over of a project, even if commanders were, generally, aiming to show presence on the ground and join operative units in their work.

Conclusion and Recommendations

Recent years have seen increased political pressure on the armed forces to solve a number of civil-support tasks, in particular to support economic reconstruction in conflict areas where civil agencies and organisations are precluded from operating. Some scholars, however, have argued that while these tasks might have been accepted on the surface they are in reality neglected. The military culture, it is argued, is averse to accepting these tasks.

My report Soldiers and state-building: The approach of the Danish armed forces to reconstruction support shows that Danish RUD/CIMIC units actually perform very well as measured against basic principles of good project work, also confirm that these units are indeed neglected in terms of

³⁷ Author's interviews, Basra Palace and Camp Danevang April 2006.

The difficulties to ensure security escorts also applied to individuals and units engaged in other non-traditional military tasks, such as police training and mentoring. Author's interviews and observations, December 2005, Copenhagen; Camp Danevang and Basra Palace, April 2006.

³⁹ Author's interviews, Garrison of Holstebro, February 2006.

planning, assignment, and access to resources. The report, however, has demonstrated that the reasons are less straightforward than assumed by the cultural aversion argument. It shows that while cultural beliefs about mission and means indeed incline the Danish armed forces to give precedence to traditional military tasks over CPA, deeper notions about human beings and human relations are compatible, even supportive of CPA. This has implications when discussing how the implementation of CPA might be improved. The cultural aversion argument would indicate the need for a general engineered cultural adjustment; a process which, according to most culturalists is extremely difficult, if not impossible. Report leaves room for more optimism. Some degree of cultural adjustment, for example, as suggested by Edgar H. Schein, through changes to education and socialisation, would indeed be required. 40 Yet, the underlying affinity between the core values of the Danish armed forces and CPA should make the challenge of promoting cognitive change less formidable.

In summary, the cultural notions about mission and means of the Danish armed forces, complicating the performance of CPA, could be challenged through changes to current educational curricula combined with an effort to document the importance of CPA to reach military and mission end-states.

Currently, CIMIC, CPA and reconstruction support barely plays a role in the basic schooling of Danish officers at the officers' schools of the different services and at the Danish Defence Academy. Many of the respondents interviewed displayed a clear understanding of the importance of CIMIC and CPA at the conceptual level. Yet, at the same time, the author watched these tasks slip down the list of priorities in a pressured situation, to the advantage of the directly security-related issues – issues taught, trained, and internalised throughout the officers' training. The fact that Danish RUD/CIMIC units perform very well on the tactical level, ironically, complicates the efforts of those who advocate an adjustment of the training curricula. The counterargument is obvious: "But any good Danish officer of the line can already do CIMIC."

Moreover, although historical analogy and the few existing interview based studies looking at local perceptions in conflict areas strongly suggest the importance of reconstruction when it comes to winning local support, the armed forces lack a system for measuring and monitoring the impact of CPA on this support. In fact, the absence of analysis and evaluation of the impact of RUD/CIMIC work, discussed above, reflects a broader problem

⁴⁰ See Edgar H. Schein. 2004. Organizational Culture and Leadership. San Francisco: Jossey-Bass.

within the armed forces. There is a general lack of methodology for measuring how the various lines of operation of a deployed contingent, including tactical military operations, impact on hearts and minds. That is, we know too little about the impact of the different instruments of a deployed Danish contingent on the core of current operations. Are arrest/search/destroy operations self-defeating in sense that they upset people to the extent of creating more enemies and problems than they remove them? Officers might have an impression of the development over their tour of duty, even though the causality might remain murky. However, the evidence is conflicting. Some officers believe that operations actually work, while others contend that they inflame and that new criminals will always fill the ranks. Currently, there are simply no good answers to these questions.⁴¹

If existing cultural notions about mission and means are to be challenged and adjusted, there is a pressing need to develop a way of demonstrating and comparing the effectiveness of various lines of operation, including CPA, when it comes to reaching military and mission end states. Even if operationalizing ways of measuring whether "hearts and minds" have been won is difficult, it should not be impossible. A combination of indicators such as the number of incidents where coalition forces are targeted, the volume of actionable intelligence from locals, the support to militias and so on could be used.⁴²

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⁴¹ Of course, there is also the possibility that waves of violence against the international forces in Iraq and Afghanistan might be largely independent of the actions of the deployed units. It is possible that they simply reflect that the longer an operation runs, the higher the level of local disillusionment with the international presence. This would call for a rethinking of the 1990s peacekeeping paradigm, which emphasised the importance of a long-term military presence to ensure time for reconciliation and for new local governance structures to take root. If indeed a long-term presence is not just part of the solution, but also of the problem, it is even more critical that training and capacity-building take centre stage.

⁴² A related challenge is the need to de-conflict and coordinate the different lines of operation. There is also, some interviewees indicated, a lack of methodology to measure political impact of tactical military operations. "Even if we plan to de-conflict once on the ground we fall back into old habits" as put by one CIMIC officer. One example might be the political repercussions of the detainment policy of the British Brigade deployed to Basra. As the Iraqi justice system was still perceived as too inefficient, detainees were kept for longer periods to win time. Yet, the detentions were used by local politicians as an excuse for disrupting the cooperation with the international forces over the spring 2006. The consequence, in turn, was that police training and capacity building were grounded during that period. Author's interviews, Camp Danevang, April 2006.

Lastly and most importantly, high level political pressure to keep minds focused is indispensable. Large organisations always involve people of different mindsets and obviously, placing more emphasis on CPA will be resisted from some quarters for different reasons. The lack of strategic planning for CPA, for example, requires action from the Ministry of Foreign Affairs and the problem of the lack of a system for capturing and transmitting RUD/CIMIC lessons learned requires action from the armed forces.

CPA is no universal panacea. It will not stop hard-core insurgents, foreign terrorists, and local war lords from resisting the international presence in areas like Iraq and Afghanistan. Yet, CPA is a way of mobilising and coordinating efforts and resources faster, to ensure that reconstruction and capacity-building get under way, including in areas where civil actors are not able or willing to operate. CPA obviously cannot and should not stand alone; reconstruction support is an important and indispensable element in winning local socio-political support and creating viable local governance structures and is thus a key to mission success.

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The Revolution in Military Affairs and Changing Security Concerns: Implications for Small States

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By now, the idea of a revolution in military affairs (RMA) – the argument that radical changes in military and military-related technologies are fundamentally and radically changing the manner in which military forces organise, operate and fulfil their strategic functions – almost seems passé, inasmuch as there is a large body of opinion that insists that an RMA is currently extant.² Indeed, this body of opinion provides a predominant understanding of this RMA – that the current RMA is technologically driven, and that the first signs of its emergence came in the 1991 Gulf War against Iraq.³

This study accepts the assertion that no military organisation can afford to be static in nature and capability, since any military organisation reflects the unique set of social, economic, material and political circumstances from which it derives. Changes in any one of these circumstances might therefore be sufficient in and of itself to effect changes in the military organisation. This RMA appears to be driven primarily, if not exclusively, by technological factors; in any case, the technological dynamic suggests that capabilities and equipment eventually become obsolete; for armed

¹ The author wishes to thank Morten Hansen for his assistance in some background research for this paper.

² For instance, James Adams, *The Next World War: Computers Are the Weapon and the Front Line Is Everywhere* (New York: Simon & Schuster, 1998); John Arquilla & David Ronfeldt (eds.), *In Athena's Camp: Preparing for Conflict in the Information Age* (Santa Monica: RAND, 1997); Eliot A. Cohen, "A Revolution in Warfare", *Foreign Affairs*, vol. 75, no. 2 (March/April 1996), pp. 37-54; Lawrence Freedman, "The Revolution in Military Affairs", *Adelphi Paper*, no. 318 (1998); Robin F. Laird and Holger H. Mey, *The Revolution in Military Affairs: Allied Perspectives*, Washington, DC: National Defense University Institute for National Strategic Studies, 1999; Michael O'Hanlon, *Technological Change and the Future of Warfare* (Washington, DC: Brookings Institution Press, 2000); Bill Owens, *Lifting the Fog of War* (New York: Farrar, Straus and Giroux, 2000); Barry R. Schneider & Lawrence E. Grinter (eds.), *Battlefield of the Future.* 21st Century Warfare Issues, Air War College Studies in National Security, no. 3 (Maxwell Air Force Base, Alabama: Air University, 1995); Keith Thomas (ed.), *The Revolution in Military Affairs: Warfare in the Information Age* (Canberra: Australian Defence Studies Centre, 1997).

Frank Kendall, "Exploiting the Military Technical Revolution: a Concept for Joint Warfare," *Strategic Review*, Spring, 1992, pp. 23-30; Michael J. Mazaar, *et al.*, *Military Technical Revolution: a Structural Framework*, Final Report of the Study Group on the Military Technical Revolution, Center for Strategic and International Studies (CSIS), Washington, DC, March, 1993, pp. 17-39;

forces to remain relevant and effective, they will have to undergo periodic change, both in terms of its hardware and capabilities as well as in terms of its doctrines and strategies.

These changes, however, can be extremely difficult to manage. Change necessarily brings the organisation into the unknown. It is somewhat analogous to the voyages of discovery that the great European explorers like Vasco da Gama, Amerigo Vespucci and Christopher Columbus undertook. Such voyages of discovery are often costly in terms of material and lives. For military organisations, the potential cost of a wrong turn assumes greater significance, since this could mean defeat in war that could possibly trigger an existential crisis for the state. This potential cost makes it understandable for military organisations to be very leery of change, especially drastic and disruptive change that the RMA portends.

However, as this study will demonstrate, the RMA will result in a smaller, leaner, but (hopefully) more capable military organisation. The RMA trumpets these qualities as virtues, but as this study will subsequently show, these may also be regarded as necessities, given the escalating costs of new technologies and capabilities. Even for large military organisations such as the United States military, this is already creating pressures on scarce resources. The potential implications for small military organisations can only be even more daunting.

The issue of maximising scarce resources comes especially to the forefront with the issue of emerging security challenges that appear to expand the number of scenarios in which military organisations might plausibly find themselves deployed to. As noted earlier, military organisations also respond to changes in various environmental conditions. There is also a security dimension to the environment that military organisations respond to – or at least they ought to. This extant RMA started as an attempt to find a solution to a peculiar Cold War problem – namely, how to defeat massed Warsaw Pact heavy armour on the central plains of the European continent, without resorting to tactical nuclear weapons whose use would almost certainly have resulted in global nuclear Armageddon. As this paper will later demonstrate, there is a growing body of opinion that the current security conditions facing most states has moved away from traditional state-oriented concerns about war towards so-called non-traditional security concerns such as peace operations, low-intensity operations such as counter-insurgency and counter-terrorism, and humanitarian and disaster relief operations stemming from pandemics and natural disasters. This paper does not assess the validity of these claims, but does argue that inasmuch as these non-traditional security concerns are the main priority of policy makers, the RMA may create a military organisation that will be excellent for strategic tasks that are rapidly becoming less and less likely.

Finally, one methodological observation is necessary. This study casts its argument at the level of small states but examines the case of the Singapore Armed Forces. The Singapore Armed Forces is an interesting case, mainly because for the small size of Singapore, the Singaporean military appears to 'punch above its weight'. Nevertheless, the concerns suggested above apply equally from the specific to the general case. Furthermore, the Singapore Armed Forces remains one of the few military organisations around the world of its size that has sought to undertake the RMA.

Manifesting the RMA

The Nature of the RMA

The critical technologies behind this RMA are in information processing and communications, which facilitate information dominance, precision targeting and joint-service operations. A military organisation that has undergone this RMA – in other words, a transformed military – can utilise information dominance to minimise the fog of war while thickening it for their opponent. This is achieved through the networking of different sensor systems into a seamless web to allow for the gathering of "real-time, continuous, target-quality information on all significant enemy assets [in tandem with] advanced command, control and communications [that] then transforms this data along with information on friendly forces into a single real-time near-perfect picture of the battle space available to all commanders [allowing them] to target, shape and distort the enemy's understanding of the same battle space."

Secondly, improvements in precision targeting render increasingly likely the prospects of single-shot kills. Together with information dominance, precision weapons promise near-certain destruction, which promises to make warfare much more efficient than ever, and to almost guarantee the desired strategic outcomes. It is the destruction of the most important targets (that is, intensive destruction), rather than indiscriminate saturation bombings (that is, extensive destruction) as was witnessed in World War II, that determines military success. Long-range standoff-range weapon systems may be particularly important because they can strike from locations that are beyond the range of most hostile weapons.⁵ The transformed military can therefore utterly dominate the battle space. The size of the military organisation, in the process, no longer becomes the

⁴ Mark Hewish, "Fishing in the Data Stream," *International Defense Review*, July, 1994, p. 51.

⁵ Ryan Henry and C. Edward Peartree (eds.), *The Information Revolution and International Security* (Washington, DC: Center for Strategic and International Studies, 1998).

determinant of military power, and a smaller but more capable military force might be able to utterly dominate a larger but less capable counterpart.

Finally, information technology facilitates joint-service integration – that is, the networking of all parts of the military organisation – that results in a military organisation with a net capability that far outstrips the mere sum of its parts. This refers to force multiplier effects that accrue from the prospect of being able to locate and destroy any emerging target in the battle space with precision weapons launched from any available weapons platform that just happens to be within range of the emerging target. This force multiplier effect is the result of the creation – through the joint integration of information resources earlier discussed – of a common organisation-wide awareness of the battle space. A target on the land can be attacked and destroyed by military assets from land, air or naval platforms. There is therefore no more truly land, or air, or naval force – all three services have been merged into one seamless organisation.

The End Result - A Transformed (?) Military Organisation

Together, these three aspects of the RMA promise a military organisation that is an increasingly lethal and capable of unprecedented levels of precise destruction.⁶ What a military organisation that has undergone an RMA looks like, however, is still a matter of some uncertainty. From the manner in which the RMA has promised to transform military power earlier discussed, however, some possibilities can be discerned. At one level, the RMA promises to "change the basic relationship between offence and defence, space and time, and fire and manoeuvre." The pervasive, realtime, organisation-wide battle space awareness that flows from the revolutions in information and communications technologies will affect conventional military operations, by firstly compressing the time factor in military planning. At the same time, however, the battle space will expand. The traditional distinctions between the forward edge of the battle area and the administrative and logistics rear areas will become increasingly blurred, precisely because of pervasive awareness allied to precision long-range weaponry; this creates an opportunity to bring joint combat power against precisely targeted aspects of the enemy's centres of gravity. This was the promise of strategic air power theory ala Guilio Douhet - the ability to bypass the land battle space altogether and precisely attack the enemy's centres of gravity far in the rear. It is this increasing lethality that the RMA

⁶ Robert W. Chandler, *The New Face of War: Weapons of Mass Destruction and the Revitalisation of America's Transoceanic Military Strategy* (McLean, VA: AMCODA Press, 1998).

⁷ Kapil Kak, "Revolution in Military Affairs-An Appraisal", *Strategic Analysis*, April 2000.

promises that leads to a corollary observation concerning the future shape of the military organisation – namely, that such armed forces can trade quantity for quality, they can be smaller, leaner, still pack a heavy punch, and therefore be more agile, more flexible and responsive.

Secondly, and as a consequence of the first, the RMA might render irrelevant the operational level of war, at least in its extant manifestation. The operational level of war is challenged by the increasingly rapid tempo of future wars. The notions of campaigns, operations and phases are increasingly irrelevant in wars that are increasingly determined in days, even hours. Even as recent as the 1991 Gulf War, there were two discernible phases – Operation Desert Shield to initially protect Saudi Arabia from possible Iraqi invasion and to build up Coalition force levels to a level sufficient for the liberation of Kuwait, and Operation Desert Storm, the actual liberation of Kuwait. Operation Iraqi Freedom in 2003, however, saw no discernible phases or operations, but manifested itself as one short, seamless campaign.

However, the RMA presents a potential dilemma: most analysis of the RMA leans towards the destruction of hierarchy as a result of real-time horizontal and vertical connectivity. But connectivity works both ways, and increased vertical connectivity does not merely result in better upwards information flows, it also facilitates greater top-down micromanagement.⁹ Information networks lend themselves to flatter structures. These technologies therefore challenge the continued primacy of existing (and often stubborn) hierarchical structures and command cultures in military organisations. The functional organisation of the military may also have to undergo a radical re-think. Layers of middle management may need to be removed. If the functional structures have to be revamped, this will have implications for the nature of command. But this is only one possible outcome. As noted earlier, it is also possible to see greater connectivity resulting in even greater levels of centralised command and control. the removal of layers of middle management resulting in the shortening of distances between upper echelons and lower echelons may result in the empowerment of lower echelons to independent actions all within the aim and intent of the operation (so-called Auftragstaktik) but the shorter distance between supreme command and foot soldier also means it is increasingly possible to supreme command to intervene in a single foot soldier's actions. Which way the RMA will go in this regard is still up for grabs.

⁸ Steven Metz, "The Next Twist of the RMA", in *Parameters*, Autumn 2000.

⁹ Kapil Kak, "Revolution in Military Affairs-An Appraisal", *Strategic Analysis*, April 2000.

Absorbing the RMA

Geopolitical Conditions

Not every state can engage with this RMA, however. In the Asia Pacific, Paul Dibb highlights a key point for regional powers who may want to engage with this RMA.¹⁰ In attempting to determine which regional armed forces are RMA-ready, Dibb argues that there are three key discriminators: the relationship to the US, the capacity to absorb RMA technologies, and threat perception.

It is important to accept that regional countries will adapt the RMA concept to their own assessments of how to deal with credible military threats. Those regional states which worry about higher levels of potential military threat from well-armed neighbours may be more attracted to the concept. Conversely, countries which perceive a non-threatening or benign strategic environment may (correctly or incorrectly) see little utility in the RMA. There may be a third category of countries which – whilst perceiving no immediate threat – seek to assert a margin of military excellence through the judicious use of the RMA adapted to their particular geographical and technological circumstances. This latter point raises another related issue. The RMA as developed by the United States is generally perceived in the region as too expensive and being on a scale of offensive fire power that has limited relevance to most (but not all) countries in the region.

Dibb's analysis focused on the Asia Pacific region, but the analysis is equally applicable to any state wanting to engage in the RMA. Basically, for any armed forces to be able to successfully engage the RMA, it must meet a number of core requirements. The first is systems integration skills, which are the most demanding aspect, since they place great demands on the country's education systems to nurture those skills and the qualities of creativity, innovation and independence of thinking. In the Asia Pacific region, with the professed Confucian ethos that underpins many of the region's countries, this will of particular difficulty, given Confucianism's emphasis on cultural and societal conformity.

Secondly, the development of joint force doctrine is required for the organisational changes associated with the RMA. In the Asia Pacific, this has traditionally been an issue that has not been given sufficient attention – attention has tended to be given to the acquisition of weapons systems without necessarily developing the doctrines needed to seamlessly integrating these weapons systems into existing or new force structures.

¹⁰ Robin Laird and Holger Mey, "The Revolution in Military Affairs: Allied Perspectives", *McNair Paper* 60 (Washington, DC: National Defense University, 1999).

Separate single-service cultures tend to be the norm in the Asia Pacific region. Thirdly, joint force operations require an integrated logistic support and maintenance structure. Here Asian states are even in worse shape than with regard to joint doctrine. Finally, the systems integration challenge is made even more difficult by the proliferation of different technologies and technological standards in the Asia Pacific region, indeed within a single country's armed forces. It is not uncommon for regional armed forces to have within its force structure weapons systems acquired from United States/NATO as well as Russian sources. Integrating disparate weapons systems may prove to be an insurmountable challenge. Dibb concludes that Asian approaches to military transformation will necessarily have to start with cooperation with the United States, given the latter's dominance of the discourse. Given the increasingly poor public diplomatic image that the United States has in some parts of the Asia Pacific region, this is becoming an increasingly unpalatable option, certainly one that is becoming more and more difficult to persuade regional electorates to support.

Overcoming Organisational Obstacles

For most states embarking on their RMA agendas, these technologies possess a significant potential to negatively impact on organisational structures and work processes. For mature conventional military organisations, the change might be even more important, dramatic and disturbing – leading to quite plausibly fundamental changes in both the organisational structure as well as the operating doctrines of the armed forces in armed conflict.

Even the most modern of military organisations is essentially an industrial-era organisation, characterised by centralised controls and processes manned by a large body of staff, fairly rigid hierarchies, and high degrees of functional specialisations. Such organisations regard information as a means to an end, whereas the current information revolution sees information as an end in itself. Martin Van Creveld argues that such industrial-era organisations tend to suffer from 'information pathology' – one example being how rapidly growing message traffic in Vietnam clogged the extant military signals networks, with little or no ability to differentiate from low to high-priority signals.¹¹ Such an industrial-era model may have been good where the competitive advantage lay in maximising output (and information was the tool for maximising output),

¹¹ Martin Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), pp. 247-48.

but may be ill adapted to situations where the focus of attention shifts to information as the end product. 12

In the case of the Singapore Armed Forces, current thinking is encapsulated in its IKC2 concept (integrated knowledge-based command and control), which emphasises network-enabled and knowledge-based warfighting and tactical and operational decision-making, utilising the full range of command, control and communications, as well as intelligence, surveillance and reconnaissance capabilities. 13 While it is probably incorrect to read too much into this, it is nevertheless interesting – and potentially informative – that this new strategic concept retains emphasis on command and control. The key weakness will likely be the tendency to retain rigid hierarchical command and control structures. It is not entirely clear if transformational technologies can work well in traditional force structures and hierarchies. Some debates within the Singapore Armed Forces regarding the future shape of the organisation are beginning to argue, however, that the Singapore Armed Forces should adopt a "flatter and more network-based system". 14 Others argue that the organisation ought to be re-organised around brigades rather than divisions.¹⁵

Another potential problem, one that may prove even more intractable, is the conscript nature of the Singapore Armed Forces. Can one expect a soldier to be fully trained in networked operations in two years of full-time active service and another ten years of reserve training (up to forty days a year of military training in the reserves) on the new technologies and capabilities? The danger then is in dividing the armed forces into two entities – a 'smart' transformed active service, and a 'dumb' version.

Affording the Revolution in Military Affairs

Value for money – translated into economy, efficiency and effectiveness – is becoming an increasing priority for all government agencies, especially the armed forces, which is almost always the single largest consumer of public resources. For small states like Singapore, this is an even more difficult problem to overcome. For the modern military organisation, this

¹² W. Richard Scott, *Organisations: Rational, Natural, and Open Systems* 2nd ed. (Englewood Cliffs, NJ: Prentice- Hall, 1987), pp. 76-92.

¹³ Jacqueline Lee *et al.*, "Realising Integrated Knowledge-Based Command and Control: Transforming the SAF", *Pointer Monograph* No.2 (Singapore: SAFTI Military Institute, 2003).

¹⁴ Seet Pi Shen, "The revolution in military affairs (RMA): challenge to existing military paradigms and its impact on the Singapore Armed Forces", *Pointer*, vol. 27, no. 2 (April-June 2001), p. 16.

Fong Kum Kuen, "A quantum leap towards knowledge warfare: revolution in military organisations in the SAF", *Pointer*, vol. 27, no. 2 (April-June 2001), pp. 80, 92, 94.

aim translates into the minimisation of the so-called 'tail end' of the military (the non-combat, support side) to the 'teeth end' (the combat side). Ron Matthews argues that value for money has become even more important in the current RMA, given the increasing high costs of emerging weapons systems and technologies. Current combat systems are simply a lot more expensive than their predecessors, and this has resulted in a kind of structural disarmament, whereby states and military organisations can afford ever-decreasing numbers of new weapons systems and platforms. Nowhere is this more prevalent than in air power, as successive generations of combat aircraft are becoming more and more expensive. A case in point is the Singapore air force's fourth generation combat aircraft programme, which has resulted in the acquisition of 12 F-15SGs as a replacement for the existing fleet of A-4SUs and F-5Es.

Against this pattern of ever-increasing costs of new weapons systems and platforms, even the advanced countries find the required expenditures prohibitive. The identified solution has been to move towards off-the-shelf purchase (often accompanied by licensed production) and collaborative procurement or weapons research development (such as the Eurofighter Typhoon and the F-35 Joint Strike Fighter). Singapore is one participant in such collaborative programmes, having joined the Joint Strike Fighter programme in 1999 as a 'Level 3 participant'. In February 2003, this participation was upgraded to a 'security cooperation participant' at a cost of US\$50 million in the system design and development phase. Such international collaborations appear to be an attractive option, but as Matthews shows elsewhere, this can be problematic. These measures are designed to mitigate the problems of affordability for the RMA, but these problems remain.

¹⁶ Ron Matthews, "Managing the revolution in military affairs", paper presented at IDSS Conference on Revolutions in Military Affairs: Processes, Problems and Prospects, 22-23 February 2005.

¹⁷ David Kirkpatrick and P. Pugh, "Towards the Starship Enterprise – are the Current Trends in Defence Unit Costs Inexorable?", *Aerospace* (May 1983). Kirkpatrick argues that this acquisition cost is increasing by approximately 10% each year. See David Kirkpatrick, "Starship Enterprise Revisited – Prospects for the 21st Century", *The Hawk Journal*, RAF Staff College (1995).

¹⁸ 'Singapore joins JSF, Australia stays out', *Defense News*, 10 May 1999; 'Singapore signs letter of intent for Joint Strike Fighter Programme', MINDEF News Release, 22 February 2003.

¹⁹ Andrew Doyle, 'Sharper focus', Flight International, 19 February 2002, p. 59.

²⁰ Ron Matthews, *European Arms Collaboration*, Harwood Academic Press (1992), ch. 3; Ron Matthews, 'International Arms Collaboration: The Case of Eurofighter', *International Journal of Aerospace Management*, Vol. 1, No.1 (February 2001), pp. 73-9.

Senior Singapore Armed Forces officials are aware of the potential long-term impact of ever-increasing costs of new weapons systems.²¹ This is especially the case since the organisation envisages transformation across-the-board. Given the slower rates of economic growth that appear to accompany economic maturity, this means that with its self-imposed cap of defence spending at six percent of GDP (less than two percent of the United States or 12 percent of Japan's military spending), putting into place an RMA agenda for the Singapore Armed Forces will be a difficult business.

Matching the RMA to New Security Challenges

The 'New Security Agenda'

In any case, the RMA may result in a military organisation that is at odds with its main security mission or operations. A debate has emerged as to the nature of the security agenda in the 21st Century for states and military organisations. Mary Kaldor²² distinguished between 'old' and 'new' wars, and argued that 'new' wars are a growing trend. Thomas Hammes²³ argued for the concept of generational warfare, and suggested that current security concerns revolve around what he calls Fourth Generation Warfare. Bruce Berkowitz²⁴ goes further, and argues that the terrain of 21st Century war will be the virtual world of cyberspace and communications networks. Whereas Colin Gray²⁵ argues that these debates are in a sense meaningless – that the manifestations of war may change, but the real issue is to remember that war in its essence remains the same.

The apparent lack of consensus amongst scholars of strategy and war ought not to obfuscate what appears to be undeniable – namely, that states increasingly are making decisions about the nature of the security environments they exist in, and the likely security concerns they face. From Europe through to the Antipodes, more and more states are come to the conclusion that the traditional security concerns – revolving around

²¹ See, for example, comments by Chief Defence Scientist Professor Lui Pao Chuen, 'Weapons of the future: let's think out of the box', *The Straits Times*, 12 July 2003.

²² Mary Kaldor, "Elaborating The 'New War' Thesis", in Isabelle Duyvesteyn and Jan Angstrom (eds.), *Rethinking the Nature of War* (London and New York: Frank Cass, 2005), pp. 210-5; also see Mary Kaldor, *New and Old Wars: Organized Violence in a Global Era* (Cambridge: Polity Press, 1999).

²³ Thomas X. Hammes *The Sling and The Stone: On War in the 21st Century* (St. Paul, MN: Zenith Press, 2004).

²⁴ Bruce Berkowitz, *The New Face of War: How War Will Be Fought in the 21st Century* (New York and London: The Free Press, 2003).

²⁵ Colin S. Gray, *Another Bloody Century: Future Warfare* (London: Weidenfeld & Nicolson, 2005).

invasion by other state actors, concerns of territorial integrity and sovereignty – are being replaced by a 'new security agenda' focusing not on the threat of what Stephen Biddle²⁶ called major war, but rather security concerns such as low-intensity military operations, peace operations ranging from enforcement to support, and humanitarian and disaster relief operations. The soldier today is more likely to be deployed in such non-traditional (and unfamiliar) roles including peace operations, humanitarian and disaster relief, and counter-terrorism – so-called operations other than war – rather than the traditional defence of the state against foreign invasion. However, these roles are inherently problematic,²⁷ and require skill sets different from those that conventional military operations demand, which typically do not occupy very much attention in the training regimes of modern militaries.²⁸ Indeed these skills might even run against the grain of the more traditional warrior skills a soldier is supposed to have.

If nothing else, there is every possibility that the 'old' and the 'new' security agendas can come crashing together. In The Strategic Corporal: Leadership in the Three Block War, Charles Krulak paints a scenario where a soldier needs to decide on a course of action that may have implications on the strategic level.²⁹ In one city block, his comrades are fighting a classic conventional military operation; in the next block, his comrades are engaged in a counter-insurgency operation; in the third block, yet more of his comrades are engaged in a humanitarian relief operation. In the new security landscape, every soldier needs to be equipped with the skill sets that will allow him to move seamlessly from one 'block' to the next. Under such conditions, the soldier needs to be able to immediately access the 'big picture' and be constantly aligned with the overall intent; otherwise that soldier will be unable to execute his missions with purpose and clarity. Of course, this ability to disseminate the 'big picture' to all levels of the military enterprise is precisely the RMA currently promises, and to be fair, appears to deliver.

If this is correct, then the command chain will have to provide more of 'bottom-up reporting' than the traditional 'top-down managing'. In a traditional military structure, layers of command are set up to maintain command and control; the question is, will these layers of command

²⁶ Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, New Jersey: Princeton University Press, 2004).

²⁷ Michael W. Doyle, "Discovering the Limits and Potential of Peacekeeping", in Olara A. Otunnu and Michael W. Doyle (eds.), *Peacemaking and Peacekeeping for the New Century* (Oxford: Rowman and Littlefield, 1998), pp. 8-12.

²⁸ Charles Moskos *et al.* (eds.), *The Postmodern Military: Armed Forces after the Cold War* (Oxford: Oxford University Press, 2000).

²⁹ Charles C. Krulak, *The Strategic Corporal: Leadership in the Three Block War* (Marine Corp Association, 1999), pp. 14-17.

Anderberg suggests that a new Command structure is needed that will introduce a civilian presence and input so as to enforce "rapid co-ordination of the basic military and civil functions". But there are also arguments to suggest that disruptions to the traditional military command structures may prove ineffective due to traditional mindsets. In response to the new demands, perhaps the approach ought to focus on flexible hierarchies and structures that can be easily task-organised to suit the nature of the situation. Preferably, command structures ought to have sufficient flexibility such that any relevant non-military agency can be brought in to address the specific issue and task. Whatever changes the militaries make, it is important to note that there cannot be a 'one size fits all' structure or method to address the spectrum of operations the military organisation has to perform.

Counter-Insurgency and Counter-Terror Operations

It is always tempting to employ the military in counter-terrorism efforts. Military organisations almost always have the necessary manpower and the skills for counter-terrorism. Inasmuch as terrorist bases and facilities can be located, through the use of intelligence, surveillance and reconnaissance capabilities that are the purview of military organisations, these can be attacked and destroyed by either the careful insertion of trained military operatives or the precise application of standoff-range firepower. Even the more passive counter-terror measures – such as the guarding of critical infrastructure – resonates with that most mind-numbingly boring yet necessary of military tasks – the provision of guards and sentries. Tapping this reservoir of manpower resources for counter-terrorism efforts therefore appears to make sense. Furthermore, it appears at first glance that the RMA does hold promise for counter-insurgency and counter-terrorism operations.³² The operational promises of the RMA – that with modern command, control and communications systems, information can be made more available to commanders to provide them a clearer situational picture of the area of operation, allowing a faster operational cycle.

That counter-insurgency and counter-terror missions are going to be more frequent in the near term seems an almost universally held opinion now. But these will likely be terrorists and insurgents unlike their predecessors – rather, these will be combatants who are as computer-savvy as their

³⁰ Bengt Anderberg, "Force Transformation in a Changing World", in *The Pointer*, Vol.32, No.1, 2006, p. 4.

³¹ Elizabeth Kier, *Imagining War: French and British Military Doctrine Between the Wars* (Princeton, New Jersey: Princeton University Press, 1997).

³² Bruce Berkowitz, *The New Face of War: How War will be fought in the 21st Century* (New York: The Free Press 2003).

counterparts. The information technology revolution has become a double-edged sword. Terrorists are also able to access technology that is commercially available to carry out operations against states that have strong military forces. This is the argument that Thomas X. Hammes makes in his book, *The Sling and the Stone*. United States military forces in Iraq are currently facing such insurgents. This presents a dilemma to all militaries as post war operations are certainly more complicated than ever before.

However, even if the insurgent or terrorist was of a more 'traditional' nature, a cautionary note is needed.³⁴ The principles of counter-terrorism and counter-insurgency are not entirely consonant with the principles of conventional warfare. The military mindset focuses on proactive problem-solving – find the problem and then fix or destroy it. It is reflected in two axioms – 'Never send in a man when a bullet will do'; and 'Firepower is cheaper than manpower'. Success can then be easily determined – at least, if the threat emanates from another state's regular conventional forces. However, firepower is a whole lot more expensive in the highly politicised milieu of counter-terrorism, where the critical effort resides in so-called "hearts and minds" measures.

Even when military force can be brought to bear in counter-terrorism, for example, when terrorist bases are located, the application of firepower has to be very carefully calibrated, so as to not incur unnecessary levels of destruction, especially collateral damage. This, of course, is where the RMA excels in – the ability to conduct accurate broad-range surveillance and reconnaissance to locate enemy positions and targets and the precise application of firepower against these targets thereafter. However, terrorists and their bases are not so easy to locate and destroy, otherwise the problem would not be as intractable as it seems. Counter-terrorism more typically involves passive security measures – the guarding of critical infrastructure and installations, which more resemble law enforcement and policing. In both law enforcement and counter-terrorism, the measure of success is reflected in the absence of incidents. Restraint in the use of force is desirable in counter-terrorism, but this may run against the grain of the military mindset.

³³ Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century* (St. Paul: Zenith Press, 2004), pp. 260.

³⁴ See Kumar Ramakrishna and Bernard Loo, "The US Military and Non-Conventional Warfare: Is Firepower Cheaper than Manpower?", *IDSS Commentary* No. 34, 21 July 2005; and Bernard Loo, "The Military and Counter-Terrorism", *IDSS Commentary* No.89, 8 December 2005.

Singapore's security planners have been increasingly pre-occupied with the emergence of the asymmetric challenges posed by terrorist organisations, accentuated by the 11 September 2001 attacks in the United States and the December 2001 arrest of 15 members of Jemaah Islamiah. The Singapore government saw these developments as a validation of the existing concept of Total Defence, which involves non-military and military agencies in ensuring Singapore's security. Indeed, the Singapore government took the concept a step further with the announcement in November 2001 that a 'homeland security' strategy would be adopted, involving closer cooperation between the military, law enforcement and customs and immigration agencies. Security Strategy would be adopted, involving closer cooperation between the military, law enforcement and customs and immigration agencies.

Peace Operations

It would appear undeniable that conventional wars are being increasingly supplanted by insurgencies and civil wars,³⁷ even if there is contrary evidence, from the Correlates of War project that shows that inter-state high-intensity conventional wars do occur on a fairly regular basis.³⁸ One priority item in this 'new security agenda' has been peace operations ranging from peace enforcement to peace keeping. Certainly, military organisations have been increasingly involved in these types of operations.³⁹ As of October 2006, the United Nations has deployed 80,976 military and police personnel in 18 different peace operations around the world.⁴⁰

It is not only United Nations-sanctioned peace operations that have increased in numbers. What has also increased is the number of so-called low-intensity conflicts; indeed, since World War 2, only 12 percent of conflicts can be classified as high-intensity conflicts.⁴¹ One study actually goes so far as to argue that the majority of conflicts in the medium term will be low-intensity intra-state in nature, rather than high-intensity and

³⁹ Leon Gordenker and Thoman G. Weiss, *Soldiers, Peacekeepers and Disaster* (London: Macmillan, 1991), p. 2.

³⁵ 'Sept 11 proves need for Total Defence, says DPM Tan', *The Straits Times*, 27 October 2001.

³⁶ 'S' pore to have "homeland security", *The Straits Times*, 5 November 2001.

³⁷ SIPRI Yearbook 2002 lists 57 major armed conflicts in the period of 1990 and 2001, of which only 3 can be considered inter-state conflicts.

³⁸ Meredith Reid Sarkees, "The Correlates of War Data on War: An Update to 1997", *Conflict Management and Peace Science*, Vol. 18, No. 1, 2000, pp. 123-44.

⁴⁰ United Nations Military, Police Deployment Reaches All-Time High In October (New York: UN Department of Public Information, Press Release PKO/152, Nov 2006).

⁴¹ Brian Reid, "Enduring Patterns on Modern Warfare", *The Nature of Future Conflicts: Implications for Force*

Development (Camberley, UK: Strategic and Combat Studies Institute, 1998), p. 28.

inter-state. Yet another study shows that the probability of states becoming involved in inter-state conflicts has dropped from 1 in 28 from 1918-1941, to 1 in 167 from 1945-1990 and 1 in 250 from 1991-2003. As the United States experience in Vietnam and the Soviet experience in Afghanistan show, a military organisation skilled at high-intensity conventional operations can flounder in the less familiar terrain of low-intensity conflict.

Both ends of the spectrum of peace operations are not always entirely similar, and either may demand different skill sets from the soldiers deployed for such missions. At the peace enforcement end of the spectrum, it is plausible enough to assume that soldiers deployed in such missions may find operational challenges not entirely dissimilar to their comrades engaged in a counter-insurgency campaign. The potential advantages that accrue from the RMA to counter-insurgency operations ought, therefore, to apply to peace enforcement operations, inasmuch as the opponent engages in insurgent activities. Peace support operations, however, appear to demand different skill sets. Furthermore, it is not entirely clear that the demands of peace operations dovetail with the capabilities that the RMA will endow on military organisations. In peace operations, the mission aim is to avoid and prevent conflict and casualties; soldiers are expected to display non-threatening behaviour, which runs against the grain of their training. There is increasing recognition of the different challenges that peace operations impose on militaries, and the acceptance of the need for specialised training – such as the creation of the Pearson Peacekeeping Centre in Canada.

Humanitarian and Disaster Relief Operations

Another security concern may be the use of the military organisation in humanitarian and disaster relief operations. In a way, this is not a new operational challenge for most military organisations, as it has been fairly commonplace for governments to mobilise its military organisation in times of natural disaster. The United States military's deployment in the wake of Hurricane Katrina is merely a more recent manifestation of this requirement. The Chinese government has regularly used the People's Liberation Army in times of major floods, for instance, both in the construction of defences against river overflows, or in the disbursement of much-needed relief supplies. What is fairly new, however, is the deployment of military organisations to other countries who have suffered

⁴² Steven Metz and Raymond Millen, *Future War/Future Battlespace: The Strategic Role of American Landpower* (Carlise, PA: Strategic Studies Institute, US Army War College, 2003), p. 13.

⁴³ Kalevi J. Holsti, *The Decline of Interstate War, or The Waning of Major War* (London: Routledge 2006), p. 136.

natural disasters – witness the global relief efforts that came in the wake of the December 2005 tsunami that affected parts of Indonesia, Bangladesh, Sri Lanka, Thailand and India.

Where does the RMA fit within the spectrum of humanitarian and disaster relief operations? It is possible that these humanitarian relief operations present challenges that run against the grain of the skill sets that military organisations have traditionally focused on – namely in conventional military operations in defence of the sovereignty and territorial integrity of the state, or in conventional campaigns projected into distant theatres of operations in pursuit of the interests of the state concerned. If nothing else, it is necessary to ask where and how (if at all) the RMA fits with humanitarian and disaster relief missions. The Singapore experience in the December 2005 tsunami disaster relief operations appears at first glance to refute this argument concerning specialised non-traditional training.⁴⁴ The Singapore Armed Forces has spent its entire history preparing for one campaign scenario – the projection of military power into Malaysia to secure water supplies against radical elements that have taken over power and cut off water supplies to the island republic. Its force structure reflects the operational need to project power into Malaysian territory, a very traditional security concern. The irony was that this conventional power projection capacity was utilised in a non-traditional mission – airlift assets like C-130s and Fokker-50 and CH-47 helicopters moved 1200 military personnel with over one million tons of cargo over some 250 sorties, 45 while heavy sealift assets moved engineering equipment such as bulldozers, excavators and cranes to establish beach landing points and clear supply routes from the coast to the devastated areas - to respond rapidly to the growing crisis in Banda Aceh.

Official pronouncements portrayed this operation as a success, but interestingly, the Singapore Armed Forces subsequently identified its 21st Division as the specialist agency for future similar missions. This act might constitute tacit recognition of the need for specialised training, and at least present weak evidence that the performance of the Singapore Armed Forces in Banda Aceh was less than completely successful. The point to note is that soldiers not trained for such missions will likely find 'learning on the job' at best a difficult experience, and certainly a less-than-ideal situation. Nevertheless, it is important to note that given the conscription base of the Singapore Armed Forces, a two-year length of active duty may be sufficient to prepare a military organisation to take on either traditional conventional military operations or the new security roles outlined above;

⁴⁴ See Bernard Loo and Joshua Ho, "SAF: A flexible force to deal with the unexpected", *IDSS Commentary 05/2005*, 31 January 2005.

⁴⁵ See Gail Wan, "Fast Aid", *Pioneer* No. 328 (February 2005).

this time frame, however, may not allow the military organisation to adequately prepare for both.

Implications and Conclusions

Military transformation ala the RMA is a necessarily difficult process; for small and middle powers, it is even worse, given the resource constraints that become even starker for these states. To ignore transformation, however, may not possible, if only because one has to keep within touching distance of technological changes. To embrace transformation, however, is not guarantee of maintaining extant military standards and position either. It requires a leap of faith, because the small or middle power is embarking on a journey in which there are no clear road maps that can guide policymaking. Not surprisingly, there remains some residual doubt as to whether or not the RMA is a path that has to be taken. Within Southeast Asia, some states have come to the conclusion that the RMA – manifested in the military transformation agenda of the United States military – is not the policy option for their conditions and circumstances.

As this study has suggested, the reasons for this reticence in embracing the RMA and military transformation come in part from the uncertainty as to what this RMA actually does for and to military organisations. In other words, what does a transformed military actually look like? How does it function in war? How does the RMA guarantee strategic success? These are difficult questions, and questions that the existing RMA literature has done little to provide convincing explanations and answers to. Is a transformed military organisation simply a more efficient killing machine than its predecessor, or should we expect a transformed military to operate in fundamentally different styles? Furthermore, as this study has tried to show, there may be some disjuncture between what the RMA promises to give to military organisations in terms of capabilities, and the likely operational scenarios that military organisations face. Assuming that more and more military organisations expect to be deployed in these so-called non-traditional missions and roles, how useful is this RMA? The answers remain elusive at best. Consequently, given the limited resources that small and medium powers have, it might be a more prudent approach to 'wait and see' - to allow these technologies to become mature, before making any decision on whether or not to embrace this phenomenon.

How then does this study explain the transformation agendas of not so much the United States military, but the military organisations of small and medium powers such as Singapore? In the case of Singapore, the answer to this question lies in the assumption that technological leaps do occur on occasions, and it is imperative that the military organisation remain as close

to the leading edge of technological development as economically possible and prudent. We already have at least one historical example of the disastrous consequences of taking great technological leaps to try to catch up with the leading edge – China's ill-starred Great Leap Forward in the 1950s. In this case, the motto was "Two Steps Forward, One Step Backward", but the reality was more likely "Two Steps Backward". It would appear that in the case of Singapore, its defence planners and policy makers came to the conclusion that the Singapore Armed Forces can ill-afford to take a Great Leap Forward later on, and that it therefore had as much as possible to keep pace with the technological leading edge.

Nevertheless, the questions that this study has posed apply equally to the Singapore Armed Forces: can the Singapore Armed Forces be ready for it, what of the RMA is essential, affordable and operationable, and does the organisation have the right systems that can maximise the impact of these new technologies on the organisation's combat effectiveness? This transformation process requires as its cutting edge the employment of extremely expensive high-end precision-guided munitions. organisation recognises that this is uncharted territory, and that it is making up the rules of the game as it goes along. On the plus side, Singapore has developed a reasonably credible military industrial complex that has at least on paper designed weapons systems and capabilities specific to Singapore's unique conditions. Furthermore, the Singapore Armed Forces has a fairly mature conventional military capability and at least a nascent joint warfare capability that allows it to make the transformation to new types of warfare relatively painless. The SAF has also put in place a strategic concept that can theoretically leverage on the national advantages of a well-educated populace, computer literacy, and relatively high levels of technological expertise. Furthermore, there are signs that the organisation is beginning to rethink its operational structures. Whether the Singapore Armed Forces will emerge from this experiment with its capacity to remain relevant to the strategic demands of the state – whether in conventional defence of the island to the ever-increasing range of operations other than war – remains to be seen. Nevertheless, it is worthwhile speculating that the Singapore Armed Forces may have to make difficult choices. If the experience of the Singapore Armed Forces is of any applicability to other small military organisations, it may be this: small military organisations cannot have its cake (conventional military capabilities) and eat it (new security roles) too.

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Future Demands on the Armed Forces – A UK Perspective

Caroline Robson UK Ministry of Defence

This article gives a flavour of the way in which the UK Armed Forces are looking at their future role and the evolution of the policy supporting the adaptation of force structure and outlook. Set in the context of a changing global security environment, it covers the various issues informing the development of the next iteration of the MoD's Defence Strategic Guidance, due to be issued in 2008. This is reviewed broadly biennially and provides direction to the planners when determining the capabilities needed to meet the demands of current and future threats.

The Changing Role of Defence

In 1998, the UK's Strategic Defence Review (SDR) was undertaken at the request of the new Labour Government. This was foreign policy led and involved a complete study of the UK's defence and security needs. The SDR identified the major challenges and, based on an updated set of detailed planning assumptions, set the criteria against which the UK Armed Forces must deliver. The SDR also produced an enduring Defence Aim, which is to deliver security for the people of the United Kingdom and the Overseas Territories by defending them, including against terrorism; and to act as a force for good by strengthening international peace and stability. The Defence Aim represents the core task of the MoD and the Armed Forces and is the starting point when considering which tasks the Armed Forces should and should not undertake.

The phrase "including against terrorism" was added in 2002 when a New Chapter was written for the SDR. While the New Chapter was added in light of the events of 11 September 2001 and the accompanying shift in the emphasis of global security threats, it did not represent a sudden awakening to the realities of terrorism; instead, it recognised that the nature of terrorism had changed. The UK had for decades experienced the impact of Irish terrorism but the violence was in the context of a predominantly territorial dispute. This was always an internal problem for the UK but the principal contemporary terrorist threat now comes from an ideology, which on the macroscopic scale is not tied to specific borders. The problem has become international in nature and, due to ever-increasing globalisation, is likely to remain so.

Along with the international terrorist threat, the proliferation of weapons of mass destruction and the risks associated with failed and failing states are high on the agenda of enduring threats. In recent years it has become increasingly clear that organised crime also has a large part to play in the increased security risk to the UK. Where it fits in with other Defence tasks, the MoD and the Armed Forces are able to play their part, for example in the interdiction of drug shipments during the Royal Navy's routine patrols of the Caribbean. Owing to ease of travel and advances in the field of instant communications, organised crime is increasingly becoming a crossborder problem. Failed and failing states are a particular problem in this respect because ungoverned spaces, especially in post-conflict situations where a lack of law and order prevails, provide ideal conditions for criminal groups to flourish. Organised crime provides a source of finance for terrorism, which when combined with weapons proliferation creates an increased threat to the UK. The counter narcotics campaign of the Afghan Government is supported by the UK through its MoD and Armed Forces and has a direct link to the security of both nations.

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Emerging Threats

After the fall of the Iron Curtain, the UK enjoyed a period of relative domestic security throughout the 1990s. Along with many of its European neighbours, it reduced the size of its standing armed forces as the threat of conflict between the superpowers receded. However the post Cold War era, which has been defined by a single dominant superpower in the shape of the United States, is now changing fast, notably with the rise in influence of China and India. This increase in geopolitical complexity may ultimately make disputes more difficult to resolve between multiple large stakeholders. Technological advance is presenting new challenges involving both state and non-state actors and the traditional advantage of the western Armed Forces is being eroded. The dependence on states at risk of instability for energy resources has also led many countries to place a renewed importance upon energy security. The UK will be nearly 80% dependent upon imported energy by 2010 and so this issue is growing in importance. The future may see the Armed Forces playing more of a role in energy security as resources become scarce. A rising global population, predicted to reach nine billion by 2050, will fuel competition for water, food, land and energy and may lead to large-scale migration. Adding to this the potential influence of climate change, resource conflicts that exacerbate existing political, ethnic and religious tensions are increasingly likely.

A great deal of uncertainty results from the speed at which these powerful global trends are developing and there is no guarantee that current assumptions will remain valid. The way in which these trends will interact

and introduce vulnerabilities into the international system remains highly unpredictable, leaving political or economic disruption in one part of the world liable to affect the entire global community.

An International Role

Globalisation has brought many benefits and opportunities and the UK has built upon its traditional range of overseas interests including trade, investment and continued access to natural resources. This expansion of horizons has also brought with it increased security risks such as the wide availability of advanced weapons technology and reliance upon modern electronic communications systems. The success of the UK is dependent on the success of other nations and, as a result, stability in other parts of the world translates into a safer security climate at home and vice versa. The UK sees the maintenance of international defence relationships as a key part of the effort to combat both existing and emerging threats as the issues facing the UK are similar in nature to those faced by many of its friends and allies. The security of Europe and investment in the transatlantic relationship remain key issues. It is an important part of the UK's security policy to remain capable of delivering effective military force alongside EU and NATO allies, both in peace support and intervention operations. As such, the UK is a leading military contributor to NATO and the EU's European Security and Defence Policy as well as retaining a permanent seat on the UN Security Council. As a member of an international community prepared to deal with a range of security challenges, the UK continues to be able to pursue its own interests and exert influence in the changing geopolitical climate. Strong alliances and partnerships are critical in ensuring the UK's future security needs are met. In the transatlantic forum, NATO remains the organisation with the greatest capacity to respond to global problems as they arise. Development of the military capabilities of the EU will assist Europe in maintaining its collective influence on the world stage and enable its component nations to better fulfil their roles in the security of the international community.

Investing in the Armed Forces

The Armed Forces must evolve with the growing security challenges in order to maintain the UK's influence as a global player and to provide a degree of insurance against future threats. The need to meet the challenge of more frequent, more agile overseas deployments has meant a move away from heavily armoured forces towards light and medium weight long range capabilities and a balanced force structure prepared for a range of tasks from hard end war fighting to humanitarian relief. Significant investment

has gone into long distance bulk transport including Boeing C-17s, of which the UK has four on lease and a fifth on order. Roll-on-roll-off shipping is also leased as required in order to transport equipment to and from theatres of operations. Investment in light armoured vehicles has also become a priority as they can be deployed more quickly than heavier variants, often by air. The UK has invested in a helicopter carrier – HMS Ocean – and two new Landing Platform Docks, amphibious assault platforms that enable improved flexibility and the exploitation of littoral environments. The Army has restructured in order to maximise the number of infantry battalions available for deployment at any one time and in addition the Special Forces have been expanded in response to the terrorist threat. The ability to collect and exploit intelligence is vital in light of the increased threat of being engaged asymmetrically. The need to communicate quickly and effectively and for the systems in a particular battle arena to work in synergy has led to a large investment in Network Enabled Capabilities and modern communications packages. Standoff capabilities such as Predator are also seeing increased utility.

Delivering such a range and balance of outputs is expensive and has required the implementation of a rigorous efficiency programme. The Defence Budget has increased over the past decade by about 8% in real terms and additional money has also been sourced from the Treasury for many operational requirements. This has permitted the much-needed investment in equipment and personnel to date and has enabled the Armed Forces to deliver the UK's current policy.

The Comprehensive Approach

The Armed Forces are one part of the government's 'toolkit' and operations in Afghanistan and Iraq have proven how important it is to fuse military capability with the civilian reconstruction efforts that deliver sustainable stability. The Post Conflict Reconstruction Unit (PCRU) was set up in 2004 to achieve this aim. Consisting of personnel from the Foreign and Commonwealth Office, the MoD and the Department for International Development, the PCRU is focused on stabilising post-conflict environments quickly in order that development activities can be undertaken, reducing the need for further military intervention. The security context in which civilian development workers may be required to operate is often challenging, particularly in the immediate aftermath of hostilities. The MoD is currently working with colleagues across government to identify the best way for the Armed Forces to enable civilian agencies to deliver reconstruction.

Developing Future Policy

Various themes are shaping the UK's current defence planning and strategic thinking. These will inform decisions on the capabilities and resulting force structure needed to meet the challenges. This article does not seek to offer a definitive response to these themes, but articulates a number of the areas, which are drawing attention from our strategic planners. Aside from the issue of whether to invest in a greater ability to carry out reconstruction activities, there is the question of whether Defence should invest more in conflict prevention. This is particularly important in the case of strategic state failure, where a targeted cross-government response may be able to stop the failure from occurring. A world in which weapons are increasingly available to opponents brings into question the potential vulnerabilities of the Armed Forces and the future impact on the UK's freedom to protect its interests. The Armed Forces need to meet the challenge of weapon proliferation and continue to deliver upon government objectives. Analysis is currently being undertaken into whether there is a contribution for Defence in the realm of energy security; a small number of states control the vast majority of the Earth's energy resources and may in future wish to use access to supply as a means of leverage.

It is clear from recent experience that the UK is unlikely to conduct future operations alone, preferring instead to deploy as part of a larger coalition. This will ideally be within the framework of a multinational institution such as the UN, NATO or EU, where the full spectrum of capabilities and manpower can be utilised to best effect. The challenge for the UK then becomes how to develop the way that existing multilateral organisations function and interact in order to maintain the agility required to meet a variety of threats.

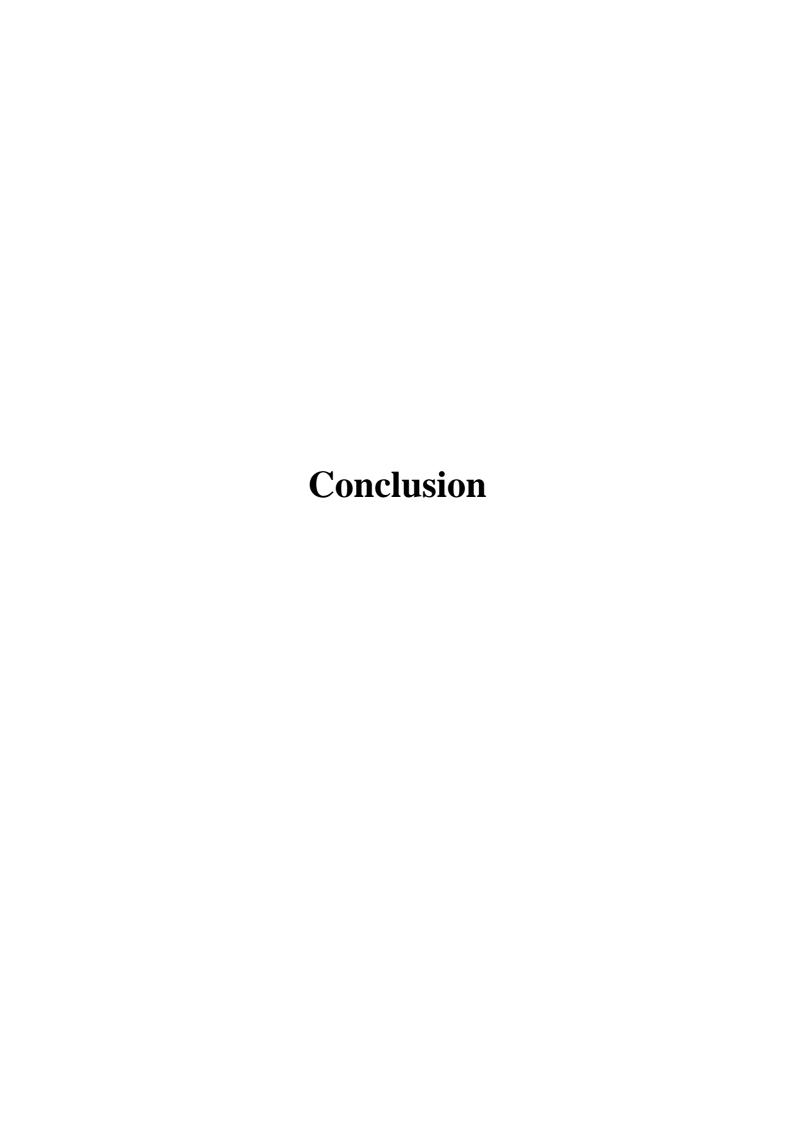
In a competitive labour market, human resource issues may become an increasing challenge. The ageing population has meant a relative reduction in the number of individuals of military age and, coupled with enduring deployments and the uncertain security environment, the result may mean difficulties in the recruitment and retention of suitably qualified and able personnel. Defence relies upon its people and shortfalls in key areas could affect the ability of the Armed Forces to carry out UK objectives.

Finally, with the rising use of asymmetric tactics and information operations against the Armed Forces, the UK must contemplate how it can compete in the 'war of ideas' to win the support of those it aims to assist.

Conclusion

In developing its Defence strategy, the UK has worked to create a balanced force structure capable of undertaking operations throughout the world in a variety of different roles. The pressures of globalisation and a rapidly evolving security climate continue to present challenges, to which the UK must rise in order to deliver security for its people. The role of the Armed Forces may expand as the security threats become more complex but the UK will continue to forward plan carefully in order to make the best use of resources and, together with her allies, will meet new challenges and undertake her responsibility to act as a force for good in the world.

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Armed Forces' Roles and Capabilities 2020: Reflections from the Suomenlinna Groupwork Sessions

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Aims and Method

How should the industrialised nations' armed forces prepare to meet the threats and demands of tomorrow?

This very profound question served as the starting point for the tenth Suomenlinna Seminar, organised by the Department for Strategic and Defence Studies (DSDS) of the National Defence University of Finland in Helsinki on May 30th and 31st, 2007. The idea was to celebrate the occasion of the tenth annual Suomenlinna seminar by organising a gathering of experts, seeking to provide insights into the possible ways to adapt not just Finnish or European but in more general terms industrialised nations' military resources to today's and tomorrow's changing security environment.

This article is an attempt to sum up some of the major findings of the twoday workshop that took place during the seminar, concentrating on this issue.

Providing insights about future tasks and missions of the industrialised nations' armed forces was indeed the impetus and rationale for the seminar. Therefore, from the onset of the seminar planning, it was deemed valuable that the programme would combine groupwork method along with the more traditional approach of prepared speaker presentations, providing thereby an opportunity to draw on the knowledge and expertise of the seminar's limited but qualified group of participants. After all, the seminar was joined by 60 plus selected invitees and speakers from 14 countries, representing both civilian and military fields with persons from various academic, diplomatic and governmental positions, as well as professionals from the media, business community, students etc., all having interest in the security issues as their common denominator.

To materialise the seminar emphasis to groupwork and brainstorming, five working groups were formed. They were scheduled to gather during both seminar days so that group elaboration would alternate with prepared speaker presentations and that the former would thereby receive inspiration and fresh ideas from the latter. In a totally undemocratic fashion, the

groups were formed randomly beforehand by the DSDS staff from the registered participants, so that each participant had an assigned working group once the seminar began. In line with this undemocratic principle, each group was assigned a chairperson and a supporting person, the latter being usually a junior member of Department for Strategic and Defence Studies.

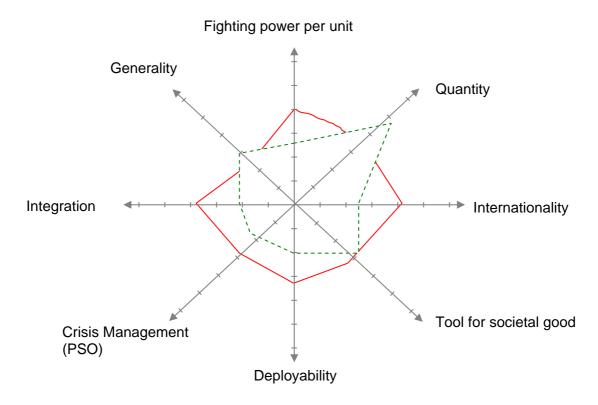
The task of the working groups was simple but somewhat unspecified. Each group was asked to fill in a simple diagram with two sets of lines (please, see the diagram below): first, to describe the issue-areas or qualities that *are* being emphasised by the armed forces of modern industrialised nations of our time (year 2007) and second, to describe the areas that *should* be emphasised by these armed forces by the year 2020. Thus, the task included a conscious normative emphasis: instead of trying to describe or forecast the future, the groups were asked to make recommendations based on their understanding.

While given the liberty to be creative, the groups were asked to name at least three military capabilities and at least three roles for the armed forces that has been and/or should be emphasised (please, see these definitions below). In addition, the groups were asked to name additional roles, capabilities or some other qualities that they saw as important.

¹ Military capability refers to the ability to achieve a desired effect in a given operating environment. Typical military capabilities include deployability of armed forces, their interoperability, or fighting power of the forces; in more precise terms, military capabilities can be special operations forces, Nuclear, Biological and Chemical (NBC) protection capabilities, strategic air and sea lift capabilities etc. Roles of the military refer to the perceived missions of the armed forces, for instance homeland defence, expeditionary role, emphasis on crisis management, assistance to other authorities within a society etc.

Illustrative Example: one way to interpret change in the western armed forces between 2007 (in dotted line) and 2020 in certain key dimensions

(The closer the lines are to the arrows of the diagram, the more a given quality is being emphasised. The closer to centre the line is, the less)



In addition to filling the diagram and equally important, the groups were also asked to elaborate conclusions based on the emerging diagram for the year 2020: for example, what did a certain emphasis mean in concrete terms, what practical steps ought to have been taken, what were the main difficulties or positive and negative effects of chosen directions, to what extent these goals were to be met with national resources etc. Even though no official notes were made, this wider elaboration was closely followed by the supporting staff and then reported to the authors of this article.

Finally, having concluded the two-day groupwork, each group chairman presented their respective group's diagrams in the concluding session of the seminar.

As such, one can find certain similarities between the above approach and the so-called Delphi method, in which experts gather to systematically discuss a certain issue-area in order to obtain forecasts about it. Even though Delphi was by no means an official starting point or procedure at Suomenlinna Seminar, we also sought to enable reliable and creative exploration of ideas and tried to facilitate the formation of a group judgement among the participants. Yet, the amount of expertise among the participants is only applicable to the extent that the groupwork format has

been able to materialise it. Therefore, the seminar findings below will be followed by further elaboration, discussing the significance of these findings as well as the benefits and limitations of the method applied.

The heterogeneity of seminar participants ensured that the discussions and the results were just as diverse as one can imagine. In order to find common ground and for the sake of practicality the emphasis of this article is on similarities rather than differences: we try to highlight the most popular and commonly agreed visions of the future rather than the multitude of various responses given, which of course would have been a most interesting exercise as such. However, when the workshop findings were put together, certain capabilities and roles clearly stood up between various groups and a number of common perceptions could be found.²

Bearing in mind these starting points and limitations it is now time to turn to actual findings of the groupworks: that is, how did the participants see the emerging threat environment until 2020 and what qualities should we develop in the industrialised nations' armed forces in order to better meet the threats and demands of tomorrow?

Defining Future Threats: Smaller, Faster and More Complex

Threats are at the core of military thinking. As it was stated in several group discussions, the presence of threats both legitimizes the existence of the armed forces and motivates their development. All the groups agreed in the beginning that to be able to define the future armed forces capabilities and roles, it is necessary to start by contemplating the nature of future threats, which these capabilities and roles are intended to respond.

Much was discussed about the difficulties of describing the future threats. Participants pointed out the question as to what extent the current threats affect our definitions of the future ones. The generally plausible conclusion was that future threats tend more or less always to be compromises between contemporary and probable emerging future threats.

Based on group discussions, new security challenges and threats have emerged beside the traditional ones. Workshop participants named long list of potential future threats starting from quite traditional ones like organized crime and arms race and ending to environmental (both climate change and pollution), cyber threat and terrorism.

² However, a few occasional exemptions will be made in the article, in which particular arguments offer important contribution or controversial views.

Not surprisingly, it was generally acknowledged that future threats vary greatly and are increasingly difficult to define. Still, summing up all the group opinions, the most prominent future threats were deemed to be terrorism, international or regional crisis, internal instability, info war or cyber threat and the problem of simply identifying the enemy. In addition, the more conventional issues of arms race and weapons of mass destruction were generally stated to pose a serious threat also in the future.

Terrorism was stated in every group as a continuing future threat. Participants noted that the most alarming problem in the acts of terrorism is that they can occur anywhere and therefore increase the general feeling of insecurity. Some of the groups expressed quite sceptical views of the contemporary "war on terror" and argued that societies should concentrate more on influencing on the causes of terrorism than just responding to the effects. In addition, some concerns were expressed about the questions of how power of defining terrorism or terrorists can be abused within a society.

International crisis was the most versatile concept of the future threats, covering a large range of issues from peace operations to humanitarian and disaster relief operations, humanitarian interventions etc. Internal instability was stated in the groups to be a growing source of threats. The explanations that appeared in the discussions concentrated mainly on growing urbanization (crime and violence), demographic phenomena, radicalization and alienation. As Raimo Väyrynen puts it, despite the fact that wars and conflicts have statistically decreased in numbers, internal violence (or microviolence) remains high within many societies.³

Info-war or cyber threat was addressed to be one of the most growing potential future threats. It was stated by the workshop participants that the global revolution of the information technology has both made societies more vulnerable and made it easier for the enemy to acquire sufficient hardware to commence cyber attacks.⁴ Concern was expressed about the uncertain capabilities of the modern society to defend itself, for instance critical navigation and communication satellites, against info-war.

The difficulty of identifying the enemy surfaced as an individual threat in almost every group. As it is stated above, especially terrorism and other vague sources of threats like humanitarian and environmental disasters have increased the difficulties of making clear and accurate threat assessments. Difficulties in making clear assessments tend easily to

³ See Raimo Väyrynen's article in this volume.

⁴ See also Bernard Loo's article in this volume where he also emphasizes the contradictory effects of the IT-revolution, describing it as "a double-edged sword."

increase general insecurity in societies. Potential threats have advanced from clearly defined lines and borders to inside the cities and "among us". Related to this issue, workshop participants emphasized the growing importance of the question about *who* is defining the threats and enemies. The potentially problematic outcome from this is that the fuzzier the threats are the greater power there is to be used or abused when defining them.

Thus, the threat spectrum, or at least the discourse on threats has expanded to cover an ever-increasing degree of non-traditional, semi- or non-military phenomena, which would suggest that future armed forces should have new roles and more comprehensive capabilities to be able to respond to these challenges.⁵ In addition, to be able to perform military missions, future armed forces are also required being able to carry out more non-military missions where their role would be more assisting and supportive in nature than offensive.

Thus, future threats seem to be more about crises, both internal and external, than invasions. If tomorrow's threats can be shortly described, one could say that they are getting smaller, faster and more complex. They also affect civilian society to an increasing amount and tend to be more humanitarian than military by nature. In growing numbers the management of these crises includes cooperation with civilian authorities, NGOs and local actors in supporting the civilians, rebuilding both hard and soft infrastructures⁶, mediating in a conflict and building peace and stability among the local people. These tasks require a totally new kind of deployability, flexibility and interoperability capabilities from the armed forces. They also require extensive cultural knowledge and language skills, thereby increasing the demands for training of future troops.

Roles: Humanitarian Relief, Internal Crisis Management - and Homeland Defence

To be able to respond to the threats stated above, workshop groups concluded that crucial future roles should be humanitarian relief and support of the civiliansm internal crisis management and homeland defence.

⁵ For a wider discussion, see articles by Robert Dalsjö, Bernard Loo, Anja Dalgaard-Nielsen and Caroline Robson in this volume about the new threats, roles and demands of the armed forces.

⁶ Here, hard infrastructure is defined as roads, electricity etc. and soft infrastructure as governmental institution etc.

Workshop conclusions highlighted *humanitarian relief and support of the civilians* as another key role for the future armed forces. Practically all the groups stated clearly that it is generally expected that armed forces will be involved increasingly in different humanitarian missions. These missions can vary from humanitarian intervention to natural disaster relief and from stabilizing failed states to reconstructing national institutions. At the core of all these missions lays the fundamental and generally emphasized objective to produce humanitarian relief by providing both protection and assistance to the civilians.⁷

Basically, it was widely agreed among the groups that if and when traditional threats are decreasing the armed forces resources should be then concentrated more on humanitarian missions and to help poorer countries in general. However, the question of how to draw the line between peacekeeping missions and state interventions was presented during the seminar, raising some discussion about this key problem. The issue was highlighted by Raimo Väyrynen's observation is his seminar presentation as he pointed out that even that the amount of the humanitarian interventions has increased by numbers there is still no established practice to execute them. Concern was expressed about the legitimacy of the state interventions because United Nations Security Council, as sole authority to legitimate them, has been bypassed i.e. in a number of recent interventions, most notably the Kosovo crisis in 1999 and the invasion in Iraq in 2003.

It was noted that international crises are increasingly having wider effects and involving increasing number of countries, due to the alliances and globalization. The environment is causing growing amounts of humanitarian suffering in wide areas because of the apparent climate change and man-made pollution. Therefore, as it was stated in the groups, resources of the armed forces should be redirected to confront these non-military global threats.

According to the collective opinion of the working group participants, *internal or domestic crisis management* can be regarded as the third main future role of the armed forces.

A growing need to direct armed forces to domestic crisis management, whether in the form of disaster relief or fighting against terrorism, requires intensified cooperation between civilian and military authorities and thereby again new capabilities from the armed forces.⁹ Armed forces

⁷ See previous footnotes about the new roles of the armed forces mentioned by the contributors of this publication.

⁸ See Raimo Väyrynen's article in this volume.

⁹ Somewhat contradictory example is presented by Bernard Loo in his article, where he describes the experiences of the Singapore Armed Forces in participating December

should remember to inform also the civilian authorities of the potential threats because they are most likely responsible of the first hand rescue services.

In the context of the internal crisis management, the question as to how to determine what is internal and what is external security came to the fore on several occasions. Distinguishing one from the other is becoming increasingly difficult due the changing nature of the crisis and threats. As described in the Homeland defence chapter above, the concept of internal or national territory is expanding, incorporating new threats inside it to be responded.

Perhaps slightly surprisingly, *homeland defence* remains at the core of future armed forces roles according to a substantial number of groupwork participants. Yet, a common understanding seems to be that a conventional threat of armed invasion has had a new set of threats by its side. It was also noted that territorial defence has always been the traditional role of armed forces and that military traditions are known to change slowly. A telling example to highlight this observation is the fact pointed put by some workshop participants that there are still circa two million soldiers in the EU nations' armed forces.

Interesting line of discussion surfaced in many of the groups about the definition of homeland. It was stated that intensifying alliances and coalitions are making it increasing difficulties to define where exactly lays the political and contractual borders of "homeland". Already among the European Union member states the definition "European homeland" is preferred politically if not practically, and the development of Common Foreign and Security Policy is only intensifying and manifesting this trend.

Most of the groups concluded that the definition of homeland is developing towards the concept of extended homeland also in a more general sense. This is due to both the alliance commitments and the ongoing regional integration processes throughout the industrialised world. Nation states are becoming increasingly interdependent, perhaps decreasing the amount of conflicts but simultaneously making emergent regional conflicts more apt to escalate. ¹⁰

²⁰⁰⁵ tsunami disaster relief operation in which SAF deployed successfully conventional military capacity in a non-traditional mission.

¹⁰ It was also noted that discussion about the extended homeland defence is connected to the increasing intelligence capabilities, enabling earlier threat assessments and producing the possibility to intervene threats at an early stage, possibly in the area of their origin.

Capabilities: Confronting Threats Beyond National Territory

If homeland defence, humanitarian relief and internal crisis management were deemed to be the most popular roles for tomorrow's armed forces, the most commonly stated future capabilities were judged as expeditionary missions, intelligence and information operations, civilian-military cooperation and force protection.

It was generally stated in the groups that future threats demand increasing *expeditionary capabilities*, that is, an ability to rapidly move forces on the areas of crisis. Furthermore, it is required that forces are able to maintain their operational capabilities for an extensive period of time in all possible conditions and situations. Many participants emphasised the importance of confronting crises already in their area of origin and the increasing importance of preventing the crisis from escalating with such rapid action.

It was commonly acknowledged that armed forces are in growing numbers participating in different kinds of relief operations side by side with the civilian authorities. Frequent environmental and humanitarian disasters, fight against terrorism and varying alliances obligations are all contributing to the need that national armed forces should further develop the deployability and expeditionary operational capabilities.

Another commonly emphasized and logically connected future capability was the area of intelligence and information operations. The ability to respond to the future threats and particularly to be able to define them and the prospective enemies requires enhanced intelligence capabilities. These capabilities in broader context were referred in some groups by using the military jargon term C4ISR as Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance. Intelligence and information capability becomes a necessity also since there is a need to respond to growing threat of cyber attacks and other threats involving revolutionized information technology. These Info Ops in military jargon can be used as a synonym for wide variety of military operations covering everything from electronic warfare to computer network operations and psychological operations. It was generally noted, as described above, that revolution in information technology has created a totally new field of threats, which can be created practically by anyone possessing sufficient expertise and technical equipment, both of which are already today freely available for consumers. To further emphasize the significance of this capability, a common agreement seemed to exist among the participants that electronical warfare is already reality and would be very likely utilised in any major future conflict.

As stated before, workshop participants' future threat perceptions indicate a clear move towards non-conventional multi-task missions involving *civilian-military cooperation*, such as peace operations, humanitarian and disaster relief, reconstruction, substitute for the civilian administration of a failed state, and counter-terrorism. It was commonly concluded by the groups that these new tasks would require a more comprehensive approach, which should include intensifying cooperation with the civilian authorities.

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The general understanding seems to be that conflicts are increasingly difficult to solve by using conventional armed forces because conflicts are more and more located in urban terrain and involve an ever increasing amount of civilians as well as various civilian actors. Therefore, there is a need to enhance civilian-military cooperation and develop combined approaches to meet these crises. On the other hand, as Caroline Robson has pointed out in her article, the security context in which civilian development workers and other actors may be required to operate is often challenging, particularly in the immediate aftermath of hostilities, thereby increasing the need for armed protection provided by the military. 12

Concerns were expressed about the so-called "stovepipe" structure, which has traditionally separated the military and civilian operations. This division was now considered to be obsolete, since, as it was pointed out, both the increasing technicality of the military systems and non-military missions create higher demand of skilled professionals. Therefore, arguments on behalf of more open cooperation between the army and the civilian authorities were widely expressed. In addition, more attention should be paid on recruiting and the possibilities of moving personnel between civilian and military assignments – a practice called "hop in –hop out" service, should be made easier.

It was pointed out in many of the groups that armed forces weapon systems are becoming increasingly technical and therefore more vulnerable. The increasing technicality is making weapon system platforms more expensive and is also creating a need for highly trained professionals to work as system operators. Therefore, armies are likely to get smaller.

It was generally agreed that all these factors: increasing high-tech, dependence on professionals and decreasing amount of system units, are increasing the armed forces vulnerability. Therefore, it was generally

¹¹ See articles by Robert Dalsjö, Anu Laamanen, Bernard Loo, Anja Dalgaard-Nielsen and Caroline Robson in this volume about the need of Civilian-Military Cooperation.

¹² See article by Caroline Robson in this volume.

¹³ This point is being further discussed by Jørgen Berggrav in his article.

recognized that *force protection* should be another crucial capability for the future armed forces.¹⁴

Debate on Hard Reforms

Having defined the required future armed forces roles and capabilities the essential question of how they can be reached surfaced in some of the groups. Both workshop participants and several seminar speakers held that responding to future threats and executing future military roles and capabilities will require significant changes in the conventional armed forces.

At the core of this transformation is the question how the armed forces can execute these roles and reach these capabilities. It was generally acknowledged in the groups that there is increasing need of specialised forces, e.g. military police to secure order and engineers to reconstruct infrastructure. Therefore, it was deemed necessary to increase the number of these troops and develop the military training to better respond humanitarian missions. However, considerably many participants held at the same time that there is still need to maintain conventional fighting capacity required e.g. in homeland defence. Therefore, the question is about appropriate ways to finance these needs. Are these new qualities to be developed simultaneously with conventional troops or should the amount of conventional troops be reduced? The previous option would require increasing the defence budgets and the latter would pose a potential risk of deterioration of the operational foundation of the armed forces.

Keeping the previous arguments in mind, some of the participants argued that reforms could be accomplished by integrating all these requirements together and developing the armed forces as a whole in the way that it would be able to have a comprehensive approach to future's complex set of crises.

Characteristically, a debate surfaced in one of the groups about the respective benefits of general conscription versus professional armies. There was clear division between different nationalities in support of general compulsory military service, limited conscription or professional army. The Finns, Estonians and Russians were unanimously supporting general compulsory military service whereas the British, Swedish and

¹⁴ In his article Bernard Loo defines the development described above as a sort of structural disarmament. This can be explained by the fact that when weapon systems are getting more expensive, at least the small countries with limited defence budgets are forced to concentrate on fewer highly developed, manoeuvrable and effective systems. See Bernard Loo's article in this volume.

French participants supported either a more limited conscription or a totally professional army. The latter group contended that professional armies would further the development of peace in crisis management operations because the troops would be better trained and therefore more capable to respond to varying demands. The main argument of the previous group on the other hand was that general conscription is making it possible to benefit of the conscripts' civilian expertise which was argued to be a substantial asset for example in the reconstruction operations.

It was also noted in one of the groups that societies rarely have resources to participate in multiple crises and to act in a wide range of roles, so that the importance of prioritising is increasing. Nations are therefore most likely compelled to choose the areas of operations and missions they are focusing.¹⁵

Still, the importance of the traditional troops and the limitations of the high-tech arms systems were acknowledged during the seminar by referring to the experiences gained from the recent conflicts in the Balkans and in Lebanon. The experiences from those crises illustrated that objectives could not be reached only by using air bombings or precision weapons. Missions were accomplished only by deploying traditional ground troops.

Where Should We Be Heading?

It is evident that a task with such a wide range of possible directions produced a multitude of responses in the working groups. Therefore, the above findings should be regarded as a summing-up of the most frequently held opinions. However, they do not provide a logical guideline, which ought to be followed as such. At the same time, it is evident that the above outcome can be subjected to limitations and critical evaluation due to factors related to seminar setting and arrangements.

Rather, what these groupwork conclusions provide us is an overall picture of the international threat environment and of the direction into which we should proceed in developing tomorrow's armed forces.

All in all, as we study the findings of the working groups, a consensus seems to have emerged that we should be talking about a new operating environment with a rise in range and complexity of missions. There seems to be no more reason to switch between "war" and "peace" situations, but

¹⁵ See article by Bernard Loo in this volume where he addresses the problem of limited resources and balancing between conventional military capabilities and new security roles.

of the deep interconnectedness of all the elements of threats, roles and capabilities. In other words, we are continuously in an unspecified space which can be defined as a *crisis* as Raimo Väyrynen did. The proper management of these crises entails a combination of various military and civilian capabilities. So it seems that the security challenges to modern societies constitute no longer a clear black-and-white picture, but more that of a complex whole with multiple elements.

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In this complicated setting, the armed forces can hardly be the only tool to manage any crisis. More likely, in Jørgen Berggrav's words, armed forces must be used as a finely tuned instrument together with other governmental and non-governmental organisations in a comprehensive approach. Or, as Anu Laamanen put it, in the changing environment of action in crises, there should be no going back to separate action by the military or the civilians. The future of crisis management requires a full commitment by all crisis management actors of the international community.

A closely related and as such very significant feature seems to be the military's gradually changing role in security: as the attention shifts from actual warfighting to "softer" and more difficultly defined issues such as security, stabilization and reconstruction, other powers and authorities seem to gain upper hand. Even though in many cases military victory may be indispensable, it will not guarantee *success* as such. Rather, the success will be measured by objectives beyond the simple military victory.

The groups envision a smaller, more intelligent military to meet these demands. A number of concrete elements to be developed were pointed out, to the extent that the demands on tomorrow's armed forces as perceived by working groups seem almost overwhelmingly diverse. While armed forces are expected both to sustain their traditional defence capabilities and to be prepared to participate in military as well as humanitarian missions in distant regions, they are simultaneously expected to efficiently cooperate with the civilian authorities and to have extensive knowledge of different cultures and languages. To fulfil these demands, future forces should be able to operate in changing roles of conventional soldier, military police, reconstruction worker and expert on civilian society's institutions.

However, as suggested at the beginning of this chapter, regarding the above findings as a concrete development programme may mislead us simply because of the sheer difficulty of putting these ideas into reality at least on the national level.

¹⁶ See Jørgen Berggrav's article in this volume.

¹⁷ See Anu Laamanen's article in this volume.

In the face of these versatile demands the nations should concentrate on two options: to prioritize and cooperate. Limited national resources are forcing nations to prioritize in which operations they are going to participate, most likely by considering which ones serve their national interest most and also respecting the demands produced by the possible alliances. International cooperation would be a logical choice to combine limited national resources and to complement each others' deficiencies.

Maybe the major future challenge lies in finding the balance between homeland defence and external missions, since that choice represents the division between traditional roles and capabilities and the new ones. Defining the relationship between traditional defence and new security threats is a fundamental question and requires difficult decisions which every nation is bound to make independently. As it was pointed out in one of the groups, perhaps the most important guideline for developing future armed forces would be to prepare to tolerate the continuing change and to be prepared to all kinds of changes. On the other hand, shouldn't the ability to adapt to changes be regarded as one of the key qualities of any worthy military?

A Final Word

Thinking of the groupwork from the beneficial position of hindsight, one can establish that the results of this kind of assignment can only be as good as the original concept on which it is based. The groupwork task can indeed be subjected to critical re-evaluation. In addition, some choices made during the preparation did affect the outcomes of elaboration.

One issue which some participants found confusing was the difficulty in defining a "generic western nation". Undoubtedly, this reflected the heterogeneity of the groupwork participants. This was most likely related to a more subtle line of confusion related to the question of how much the setting and the outcome reflected the particularities of the Finnish situation versus the more general "Western" problemacy. Even though the organisers consciously tried to avoid imposing the Finnish military's point of view onto groupwork, this was unavoidably reflected in the groupwork elaborations, since about half of the participants were Finnish. This likely played a big role also in the groups' surprisingly strong support to conventional military capabilities.

Another potential source of criticism was the proposed time-span from 2007 to 2020, which was for some too short a period. The main argument behind this was that the systems are already in existence and thereby essentially reflect the present thinking. Yet, the opinions about this were

mixed, since for some other participants the time span was deemed to be too long to make any credible arguments. However, we may ask ourselves the question as to what extent is the understanding provided by the groups and by this article simply reflecting the perceived demands of the year 2007 in stead of a genuinely long-term thinking. Naturally, this reflects the more general difficulty of trying to estimate the requirements and consequences of a future security environment.

Neither should we ignore the psychological dimension in this exercise as another factor influencing the results. Often, the decision to form mixed groups produces results which are not likely to be very assertive or provocative. Quite a different, even though not necessarily better, outcome could have been reached if the groups were formed on the basis of clearly like-minded people, persons from similar professional backgrounds or on the basis of nationality.

Notwithstanding these considerations, the results of Suomenlinna Seminar's two-day workshop highlight the increasing complexity of tomorrow's security environment and the difficult challenges ahead. Simultaneourly, they give us a number of recommendations, at least in terms of directions into which we should proceed. The final recipe for tomorrow's armed forces, if such a thing exists, may not have been disclosed in these sessions but most likely we now understand slightly better the nature of future threats and the ways armed forces could and should respond to them. Therefore, this is a most suitable occasion to once more express our gratitude to everyone who participated in the groupwork sessions, in particular for the chairmen for their dedicated work and for supporting staff for their careful documentation. This has been an opportunity to learn for us all - perhaps not least about our own thinking.

Tommi Koivula is a senior researcher at the Department of Strategic and Defence Studies, National Defence University of Finland. Jyrki Helminen has worked as a research assistant at the same department.

X Suomenlinna Seminar

ARMED FORCES FOR TOMORROW

30.-31.5.2007, Helsinki
Organized by the National Defence University of Finland,
Department of Strategic and Defence Studies

SEMINAR PROGRAMME

WEDNESDAY, MAY 30th

| WEDNEODA | 1, III/ (1 00 | | |
|----------|--|--|--|
| 08.30 | Arrival of the guests to <i>Maneesi</i> , the premises of the National Defence Courses, address Maneesikatu 6 | | |
| 09.00 | Opening Remarks: Colonel Juha Pyykönen, Director of DSDS | | |
| 09.15 | SESSION I: FUTURE THREATS Chair: Juha Pyykönen | | |
| | What is the future of conventional war? What are the emerging security threats? | | |
| | Speaker 1: Director Raimo Väyrynen (The Finnish Institute of International Affairs): "The Waning of Major War?" | | |
| | Speaker 2: Robert Dalsjö, Senior Analyst with the Swedish Defence Research Agency (FOI): "Emerging Security Threats" | | |
| | Discussion | | |

10.15-10.30 Break

10.30 SESSION II: NEW DEMANDS FOR ARMED FORCES
Chair: Pekka Sivonen

What expectations are posed to the military by civilian actors? How does the military see these demands?

Speaker 3: Anu Laamanen, Head of the Unit for Civilian Crisis Management, The Ministry for Foreign Affairs of Finland: "Expectations to Military from Civilian Crisis Management"

Speaker 4: Rear Admiral Jørgen Berggrav, Director General, Defence Policy and Long Term Planning Department, The Royal Norwegian Ministry of Defence: "A Military Point of View"

Discussion

| 11.30 | Departure from Maneesi to Kauppatori | | |
|-------------|--|--|--|
| 12.00-12.30 | Transfer from Kauppatori to Suomenlinna | | |
| 12.30-14.00 | Lunch break at Suomenlinnan Panimo | | |
| 14.00-16.30 | SESSION III: GROUPWORK | | |
| | How should we develop the roles and capabilities of the military? What qualities should be emphasised? | | |
| | Organization, aims and guidelines for groupwork/Chairman | | |
| | Groupwork | | |
| 16.30 | Free time, opportunity to visit local museums and Suomenlinna Officers' Mess | | |
| 18.00 | Reflections from the ten years of Suomenlinna Seminars by Col. (rtd.) Heikki Hult, followed by Buffet dinner at the Suomenlinna Officers' Mess and return to Kauppatori at 21.00 | | |

THURSDAY, MAY 31ST

08.30 Arrival of the guests to Maneesi, address, Maneesikatu 6

09.00 SESSION IV: ASPECTS OF SUPPLY - RESOURCES AND

PRACTICES

Chair: Mika Kerttunen

What are the prospects and limits? How have the armed forces assumed new capabilities in various cases?

Speaker 5: Senior Researcher Anja Dalgaard-Nielsen Head of Research Unit of Political Violence, Terrorism and Radicalization, Danish Institute for International Studies (DIIS): "Soldiers as Future State-Builders: Opportunities and Limits"

Speaker 6: Bernard Loo, Assistant Professor in War and Strategic Studies, Nanyang Technological University, Singapore:

"Small and Middle States: Between Scarcity and Flexibility?"

Speaker 7: Caroline Robson, Desk Officer for Denmark, Finland, Iceland, Ireland, Norway & Sweden, Ministry of Defence, United Kingdom: "A Case Study: The British Perspective"

Discussion

10.20-10.30 Break 10.30 Groupwork finalising. Coffee available 12.00-13.00 Lunch Break **SESSION V: CONTINUITY AND CHANGE** 13.00 Chair: Antti Sillanpää What is the future of standing armies? Are there really new issues at stake? Speaker 8: Professor Holger H. Mey, Vice President, Advanced Concepts, Defence & Security, EADS: "The Role of Technology in Future Warfare - Opportunities and Limitations" Speaker 9: Professor Martin van Creveld (Hebrew University of Jerusalem, Israel): "Armed Forces for Tomorrow?" Discussion 14.20-14.30 Break SESSION VI: SUMMING UP - WHERE SHOULD WE BE **HEADING?** Chair: Juha Pyykönen

Presentation of workshop conclusions followed by discussion
Concluding remarks, Colonel Juha Pyykönen, Director of
DSDS, followed by coffee and pastry

15.40-16.00

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