

Viribus Unitis

ISMS Annual Conference 2014

Armed Forces for 2020 and beyond
Roles | Tasks | Expectations

Walter Feichtinger and Benedikt Hensellek (Eds.)

Militärwissenschaftliches Journal der
Landesverteidigungsakademie



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Foreword

Dear Colleagues,

The International Society of Military Sciences was established six years ago due to practical needs and reasons. However, two years before its establishment the Netherlands and Austria began an academic cooperation in order to answer questions that were arising from the international engagement in Afghanistan. It became clear very soon that European and western countries of similar size and similar interests regarding international peace, security, and comparable strategic and military culture, are facing nearly the same problems and challenges. It was obvious to us that a scientific cooperation is needed to find answers for what was happening or what should happen in an environment like Afghanistan and beyond. This explains the specific format we have at ISMS.

Today ISMS is an informal cooperation of military academies, colleges or universities from ten states. ISMS has a unique selling proposition by offering an annual conference for experts in and around Armed Forces on an academic level. ISMS is an outstanding factor - where else can you meet professors and students in the same working group to discuss issues of highest relevance? Where else can you find PhD students who are dealing with the same topic but from different angles and academic faculties – may it be international law, operational arts, technology or international relations? Interdisciplinary approaches to recent and future challenges are an added value we can offer.

In addition, this year we had the first professors' retreat, which the Council confirmed that this format provides exactly what is missing in many of our institutions – to have time to reflect on what is happening, to identify relevant factors for security in the future and to discuss intensively with colleagues from different disciplines. This makes professors fit for teaching at our academies, colleges and universities.

Recently, the situation in our countries is quite similar to that of others, many discussions are overwhelmed by recurring themes of budgetary cuts, the need to save money and to do more with less. Which is to a certain extent understandable – but it is not the whole story. Especially military planners have to widen their horizon and to take also strategic trends into consideration. The intent of the organizers for this year was to follow that strategic obligation and to provide inspiring ideas and suggestions. That is exactly what ISMS tried to achieve in the previous annual conferences.

The general theme of the ISMS Annual Conference 2014 was “Armed Forces for 2020 and beyond. Roles | Tasks | Expectations”. This booklet serves as a collection of all abstracts of ideas and theories that were successfully submitted and present in Vienna, Austria, for the ISMS community and the interested public. It does not only give a perfect overview of the topics and titles – it also provides the contacts of the presenters in case you want to get detailed information.

Dr. Walter Feichtinger, BG
ISMS Council
Austrian National Defence Academy

Background Information for the ISMS Annual Conference 2014 in Vienna

The title of this year's ISMS Annual Conference, "Armed Forces for 2020 and beyond – Roles | Tasks | Expectations", opens the door for a broad thematic approach. By raising the question of future requirements and the possible role of armed forces, it tries to identify the security policy environment for future operations and missions.

The topic should also encourage outside of the box-thinking. Just to mention a few questions and considerations coming up immediately: What technical innovations are already on the way, waiting to be implemented? Drones are already in use, raising serious discussions and disputes within the international law community. Additionally, which effects and impacts will robotics and miniaturization of systems deliver?

Another field of interest will be the composition of armed forces. Most European states have changed their military structure to professional armies, while private military companies are prepared to fill security gaps. Do we have any idea of how cooperation and division of labour will look like in 5 to 10 years? What type of individuals will be willing to join the armed forces in the future? What kind of selection criteria and societal differentiation can be expected?

Regarding operational arts: do European armies still prepare for the previous war (as it is often said) or will scenarios like the most recent ones in Ukraine or in Mali lead to significant changes? In other words – does the training, equipment and education play up to the current and future security needs?

Seen on a more general level: what will be the future understanding of keywords like security, strategy, war and defence, and combatants? Can future security requirements have the potential to influence structures and ministerial competencies? Will the UN, NATO or the EU play the same role in 10 years as

they do today? Can we expect the evolution of a common Western or European strategic culture and if yes, to what end? Did we experience similar situations and challenges in the past?

At a first glance, the topic seems mainly to focus on a European perspective. But this does not exclude additional views and expectations from beyond Europe, because it is the global environment that is shaping Europe's approach to future security challenges.

The overall theme chosen for 2014 is intended to inspire participants of the conference and, especially, scholars, professors and researchers. It should be perceived as an opportunity to "enlighten" yourself, your working group and the whole ISMS community.

Description of the ISMS Working Groups

1. War studies

Military strategy, operational art and tactics, contemporary operations, conflict, future warfare, asymmetrical warfare, psychological operations, peace support ops, COIN, military support for civil authority, doctrine development, military theory and practice, lessons learned and identified, terrorism and counter-terrorism, organized crime, intelligence, military policing, international police operations, regional approaches, privatization of security, special forces.

Chair: Professor Dr. John David Young, Royal Defence College of Canada
E-mail: young-j@rmc.ca

2. Military history

Chronological, geographical, component (army, navy, air force), thematic, military biography.

Chair: Dr. Eric Sibul, Baltic Defence College
E-mail: eric.sibul@baltdefcol.org

3. Military technology

Information systems, systems testing, impact of technology on operations, weaponry, interaction with human dimension, R&D agendas, industry connections, life cycles and defence acquisition, network centric warfare and network enabled capabilities.

Chair: Professor Dr. Hannu Kari, Finnish National Defence University
E-mail: hannu.kari@mil.fi

4. Leadership, Command and Control and Basic Competences

Sense-making, trust, stress, group cohesion and resilience, case studies, cultural awareness, gender, communication skills, mediation & negotiation, self-reflection, organizational culture, diversity management, temporary units, physical and psychological characteristics, human factors analysis, cognitive abilities, recruitment and selection, education and training, post-traumatic stress, military medicine.

Chair: Dr. Soili Paananen, Finnish National Defence University
E-mail: soili.paananen@mil.fi

5. Law and Ethics

International law of armed conflict, international humanitarian law, rules of engagement, jus in Bello, jus ad bellum, jus pos bellum, status of forces agreements, pre-emptive action, moral dilemmas, values and transmission of values.

Chair: Professor Dr. Maja Eriksson, Swedish National Defence College
E-mail: Maja.ErikssonKirilova@fhs.se

6. Security and Defence Policy and Strategy

International organizations, actors, factors-threats, cooperation, security regimes, alliances and coalitions, interests, risk evaluation and management, international relations, scenario development, crisis management, security complexes, influence strategy, coercion, deterrence, modelling, game theory, defence diplomacy, etc.

Chair: Dr. Thomas Pankratz, Austrian National Defence Academy
E-mail: thomas.pankratz@bmlvs.gv.at

7. Armed Forces and Society

Nation-building, institutional gaps, military sociology, armed forces as societies, armed forces in society, civil-military relations, conscription and professional armies, gender-ethnicity-identity and minorities, military families, unions and soldier associations, social experimentation and social activism with armed forces, media, public opinion, democratic control of armed forces, security sector reform, international cooperation, privatization.

Chair: Dr. Rene Moelker, Dutch Defence College
E-mail: r.moelker.01@nlda.nl

8. Defence Management and Economics

Resource management, change management, transformation, cost-benefit analysis, logistics, defence acquisition, strategic personnel policy, accounting, defence administration, military industrial complex, measures of effectiveness, benchmarking, outsourcing, privatization, base closures, infrastructure issues.

Chair: Dr. Robert Beeres, Dutch Defence College
E-mail: rjm.beeres@nlda.nl

9. Military Education

Curriculum development, pedagogy, standards and evaluation, professional development, academic freedom, case studies/simulations/exercises, professional collegiality in military education.

Chair: Dr. Paul Mitchell, Canadian Forces College
E-mail: mitchell@cfc.dnd.ca

Working Group 1

War Studies

Working Group Chair Report

John David Young

**Department of Political Science
Royal Military College of Canada**

Wolfgang Etschmann

**Institute for Human and Social Sciences
Austrian National Defence Academy**

Generals Wosolsobe and Csitkovits, Distinguished Guests, Fellow Conference Participants, Ladies and Gentlemen:

It is a distinct pleasure to offer a few summary remarks and a concluding overview of this year's Conference activities of the War Studies Working Group. To begin, let me say on behalf of Working Group 1 how much our proceedings and panel sessions were facilitated by the superb organizational and intellectual guidance of Brigadier General Dr Feichtinger, whose inspired chairmanship of the Austrian Presidency of ISMS has been evident in all aspects of this tremendously successful Conference. Among the many members of the National Defence Academy team who contributed so effectively to our shared efforts under Dr Feichtinger's leadership, I would like to thank Benedikt Hensellek in particular, who seemed – almost magically - to be always nearby with solid advice delivered in a user-friendly manner and whose preparatory work was impeccable. I know as well that everyone who participated in our Working Group's debates would want me to highlight the outstanding contributions that Dr Wolfgang Etschmann, our War Studies Co-Chair, brought to

discussions following the presentation of panel Papers. Dr Etschmann brought the insights of his distinguished career to all topics on this year's War Studies programme. And so again on behalf of our Working Group, I wish to express sincere thanks to my good colleague Wolfgang.

With regard to this year's accomplishments within the War Studies Working Group in addressing the Vienna Conference's theme – *Armed Forces for 2020 and beyond, Roles/Tasks/Expectations*, even a cursory glance at our Working Group's description on the ISMS website (www.isofms.org/pagina/working-groups-description) will indicate the extensive scope of our subject- areas and the wide-ranging focus that Group 1 applies to this critical subset of contemporary and future concerns within the Military Sciences of the early twenty-first century. Our Paper presenters and Session participants this year were notably diverse in terms of academic discipline, professional background and research programmes. This brought significant value-added dimensions to our within-group scrutiny and analyses of a broad spectrum of practical and policy-relevant issues. For example, War Studies Papers addressed: operational lessons-learned and strategic insights from the comparative vantage-points of the conflicts in Libya, Mali and Syria; the challenges posed for European and North American Armed Forces by current practices of jihadi recruitment in refugee camps - more specifically in the Horn of Africa; and, doctrinal futures with respect to the operational art of counter-insurgency warfare – on this topic, echoing the Conference theme, the past was not considered to be necessarily prologue to future theatres of operation. We then implicitly scrutinized COIN theory and doctrine in terms of a real-world snapshot of situational awareness and functional adaptation at the tactical level, via Shaun Allan's detailed account and commentary as a participant who was targeted by a Taliban ambush in Now Zad (Nawzad district, Helmand, Afghanistan).

Our Working Group then dissected in some detail the increasingly prevalent practice of militaro-security outsourcing, - observed through one national culture in the instance at hand, but destined to play a core role as *Long Wars* play out against the backdrop of repetitive rotations of professional Armed Forces on a diminished personnel base – reflective, in turn, of the strategic and opera-

tional consequences of the calculations of austerity-politics. We then closely examined a Finnish account and analysis of the militarization of border controls, a subject that would be difficult to improve upon for topicality and our Conference themes.

Since each Working Group is to confine its summary overview to approximately five minutes, I must be brief. Our second day of work was devoted to following up our Group's thematic focus to the near-, short-, and long-term (out to 2020 and beyond as this Conference's frame of reference has expressed it) threats and challenges that informed and careful attention to empirics and trend-lines indicate Armed Forces are likely to confront. Thus, we productively assessed the multi-dimensional hybridity of both threats and warfare via varying analytical points of reference, such as case studies of the Syrian and Ukrainian armed conflicts, threat scenarios viewed from the perspective of small States, and the contemporary dynamics and impacts of cyber warfare. In these ways, the War Studies Working Group sought to adhere to the informing themes of this ISMS Annual Conference, which are particularly relevant to our present and future challenges and opportunities. As Chair, may I join with our Group's Co-Chair, Dr Etschmann, in thanking all those who participated in our deliberations, particularly those who submitted and presented Papers.

I would be remiss if I did not express the sincere appreciation and gratitude of all of us to Commandant Erich Csitkovits for being such a consummate host, and even more immediately given our wonderful setting, for giving us the opportunity to conclude our sessions in this magnificent *Sala Terrena*.

Hybrid Threats: A Future Threat Scenario and Implications for Small States

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In a politically and economically globalized world, small states have to adapt their security policy strategies. Dependence and 'vulnerability' as well as the chance of getting involved in conflicts directly or indirectly are increasing. There is also the fact that borders between conflict and competition become more and more indistinct. Moreover, the number of actors like NGOs increases and it is harder to define violent actors. Therefore finding solutions in the case of cyber attacks is an essential challenge for states.

The clear understanding of modern mechanisms of power projection is a prerequisite also for small states for obtaining offensive and defensive national state autonomy (e.g. to secure feedstock supplies). That includes primarily the ability to recognize threat potentials from home and abroad. Small states could become targets for political, economic and/or religious reasons. This diminishes the room for manoeuvres of these states. More international cooperation in the field of politics, economy, military and national capacities and bundling of national capacities is needed for national crisis and security provisions as well as for international crisis- and conflict management. Possible interactions between participation in international crisis and conflict management and resulting threats in contributing nations can evolve.

This project includes the analysis of three reference states: the Netherlands, Sweden and Slovakia. The main focus will be on Comprehensive and Whole of Government Approaches. Because of its topicality, the cyber component in the area of critical (energy) infrastructure will also be considered.

Research Questions:

- How far are possible hybrid threats recognized at the state level and which strategies and concepts of prevention exist?
- What are main aspects and elements of their governmental threat analyses (What is the role of armed forces? The focus should be especially on critical infrastructure in correspondence with cyber threats.)
- What is the importance of the integration into security organizations (e.g. NATO)?
- Is an interaction between participation in international crisis and conflict management and related risks perceived as a threat in the contributing nations? What are the consequences for the scope of governmental security provision?

Research Goals

1. To describe and compare security policy conceptions of selected small states regarding their assessment of potential threats and resulting active and passive protective measures.
2. To present possible findings and conclusions from an Austrian perspective regarding threat scenarios, especially focusing on the cyber component.
3. To demonstrate potential consequences for a general government and particularly for a military approach.

Ambush in Now Zad: A Snapshot of Fighting the Taliban in Afghanistan

Shaun Allan

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British Forces have taken part in a hard fought insurgency in Afghanistan's Helmand Province for the last thirteen years against a determined and ferocious foe. The British forces kinetically involved in fighting the Taliban have often taken part in unknown small-scale battles involving small numbers of troops, and were often outnumbered by their enemies. This paper will discuss an ambush sprung upon two sections (16 men) of Royal Marines Commandos and their Royal Engineer Commando support (four men) on Operation Herick 5, 2007, whilst they were laying an ambush themselves near to Now Zad town centre and the subsequent drama that unfolded thereafter. The paper will use the presenter's own experience of the planning for the ambush, setting up the ambush and countering the Taliban's counter-ambush, the confusion of battle and the extraction of the marines and engineers from the killing zone. This incident was similar to many thousands of incidents the British forces have been involved in, in Afghanistan and therefore has never been reported. The paper will show the skill, courage and determination required of British soldiers to fight in Helmand Province, and also enlighten the listener to the daily threat and danger faced by frontline British fighting troops whilst deployed for the last thirteen years in Afghanistan.

The Future of Counterinsurgency Doctrine: to Relearn Old Lessons, or Learn anew?

Peter Randall

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This paper sets out to answer one of the current questions on the United States Army War College's Key Strategic Issues List: "How can the Army best institutionalize the lessons learned over the past decade, or should the Army make the deliberate decision to relearn these capabilities in future conflict?"¹ Central to this issue is doctrine, which forms the conceptual component of fighting power: the doctrine that armed forces create from their experiences in conducting counterinsurgency operations in Iraq and Afghanistan will prove central to how these armed forces conduct at least the opening engagements in their next counterinsurgency operation. Counterinsurgencies are the most likely engagements that the United States and NATO will face in the future, so the question of how they will do so is of importance.

Chiefly instructive in looking at the value of learning lessons from last conflicts in constructing counterinsurgency doctrine is the British and American experiences in the conflicts in Iraq and Afghanistan between 2003 and the present. The British Army attempted to apply doctrines developed from counterinsurgency experiences in Northern Ireland and Malaya, this application caused issues for the British Army in their occupation of Iraq, and caused British counterinsurgency doctrine to be reformulated as a result. Would the British have been better off not having a counterinsurgency doctrine, or is it a realistic expectation that the British could have developed a counterinsurgency doctrine suitable to the conflict in which they found themselves? This paper attempts to identify what lessons in counterinsurgency are valuable and should be retained for future conduct, and which are non-

¹ USAWC Key Strategic Issues List 2013-2014 (2013), p. 2

transferrable and should be excised from practice outside specific conflicts. Going forward, it attempts to identify what lessons Western militaries should draw from the conflicts in Iraq and Afghanistan, and how they should incorporate these into their doctrines.

The Future of Hybrid Warfare: Lessons-Learned From the Syrian Civil War

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Briefly, hybrid warfare can be defined as a systematic operational integrity of regular and irregular concepts, strategies, and tactics in a given armed conflict. By nature, it incorporates state and non-state belligerents, and refers to a gray area in War Studies discipline and military affairs.

This paper argues that some distinctive geopolitical aspects, key functionality of some existing and recently introduced game-changer weapon systems and combat tactics, unusual command & control (C2) structures among the regime and opposition echelons, and different levels of involvement by the outsiders have already brought the Syrian Civil War into prominence with regard to hybrid warfare theory and practice.

A careful assessment of the geostrategic patterns of the prolonged civil war suggests that the Syrian battleground show critical similarities with the initial stages of the first Arab – Israeli War in the late 1940s, which is called “the battle for the roads” by many military historians and strategists. Intensive clashes along the critical choke points on M4 and the M5 highways, which connect the Mediterranean coast and the commercial hub of Aleppo to the capital Damascus respectively, have put forward the main examples for this hypothesis. Furthermore, a set of interrelated urban, sub-urban, and rural battlegrounds have led to sieges onto key choke points and strongholds that offer a valuable source for the comparison of medieval siege warfare and the current military siege endeavors within the context of unchanging nature of war in a Clausewitzian sense. On the other hand, with respect to changing characteristics that point the very difference between the notions of war and

warfare, the importance of air power comes into the picture as the sieges and blockades continue. This study argues that the Syrian Arab Air Force has been serving as one of the most crucial assets for the Baathist regime by preventing a geopolitical collapse so far.

As noted earlier, some weapon systems have also offered key takeaways for getting a good grip on arms & tactics of future hybrid warfare environments. At this point, the regime's gradually intensifying use of barrel bombs is an example. This newly introduced bomb, which has seen important advancements in the course of the conflict, has been employed for fulfilling a wide array of functions, ranging from flying anti-personnel missions to denying urban warfare advantages by destroying buildings, and even to depopulation endeavors through indiscriminate use. In tandem, we see that MANPADS and guided anti-tank weapons have gained key importance for the opposition forces to counter the regime's air superiority and armor advantages. Therefore, this paper focuses on a strategic arms& tactics assessment in the light of aforementioned lessons-learned points.

Finally, we see that the Baathist regime has managed to weather the initial opposition momentum at the outset of the civil war by relying on politico-militarily reliable *praetorian* units and critical support from its allies that even reached to a *foreign internal defense* role, as seen in the Iranian involvement. Thus, the paper provides a detailed discussion on the role of C2 structures and shifts in the doctrinal order of battle in hybrid warfare, as well as the role of outside actors.

Cyber Warfare in a Contemporary War

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Traditional understanding of war is related to the so called Westphalian order existing among states. Even in this context, there is no one common definition of war. Legal definition is not the same as one coined from strategic point of view. In the light of initial research, it is the military aspect as the essential feature of war. We may agree that military forces are still one of the most important instruments of international policy carried out by states to secure its both vital and less important interests. Thus, military power has still a significant impact on the possibility of uninterrupted existence and development of these states, which directly shapes their security.

However, contemporary geostrategic environment makes this problem much more difficult. Nowadays, we face clear appearance of a many powerful non state actors. What is more, recent tool set of international politics is much more complex that it was even a few decades ago. Moreover, new spaces of competition or struggle appeared. Clear example of this is the cyberspace and cyber security issues related to it. Cyber space is a relatively fresh area of a human activity, thus legal system regulated this activity is in a very initial stage. We can observe in this space massive private pleasure type of motion, huge commercial activity on the one hand and criminal, terrorist and military warfare on the other. In this situation one can ask what actually is military warfare in cyberspace, and how does it shape the nature of contemporary war?

The basic premise of the study to be presented, is that the key assumptions and the conceptual system of military warfare in cyberspace, should originate from the conceptual findings in the field of security studies.

The content of the proposed speech and further article, will be then the identification and description of the nature (substance) of military warfare, defined by the essence of such category as weapon. As the next step of this transformative understanding of cyber space environment, an analysis of the substance and components of military warfare in cyberspace will be performed. The presentation will conclude with the inferences on the nature of contemporary war, waged also in the new domain of cyberspace.

Foreign Military Interventions and Terrorism: Examining potential Syrian Intervention in a Context of Lessons Learned from Libya and Mali

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The authors seek to understand and explain Western reluctance to intervene in Syria on basis of experiences learned from previous interventions in Libya (2011) and Mali (since 2013), for a potential intervention in Syria would most probably be conducted similarly.

Despite critical and urgent needs due to the World's biggest humanitarian crisis, that already have claimed more than 160.000 lives and displaced half of the country population, the international community does not seem eager to engage actively on the Syrian ground or skies. Many claim that the Western public opinion is tired of last decade prolonging, unsuccessful and morally disputable wars in the Middle East and Central Asia, yet the real reason for lack of intervention is rather a lesson learned from Libya, not Afghanistan. The NATO's Libyan intervention, known as Operation Unified Protector, that earned UN Security Council recognition to provide all necessary means to protect the civilian population, was in fact an important factor destabilizing the region of the Saharan Africa, by removing a brutal, yet strategically important actor to the region.

The collapse of Libyan regime, spread of Qaddafi's arms and return of his Tuareg mercenaries to the northern Mali, ignited the revolution, that subsequently hijacked by the radical Islamist groups (some affiliated to AlQaeda), gave birth to a French military engagement in Mali. This intervention, codenamed Operation Serval, had as a goal to eliminate radical Islamists groups and restore the state integrity and Bamako power over the

northern provinces. Despite the visible success of the NATO and French operations in Libya and Mali, some violent elements were scattered around the desert, rather than defeated, and the Libyan state is on the verge of collapse. Operation Serval might be perceived as „a correction” to the Libyan intervention, which, on the other hand, considered a just war by some in the West, could be rather seen as a strategic disaster, that destabilized the region.

It is exactly what is being avoided in regard to Syria, by refraining from intervening. Since it is not the Assad regime that poses threat to the West and its interests but the violent extremists groups such as the Islamic State of Iraq and the Levant (or Al Nusra Front, etc.), that controls vast territories in remote parts of the Syrian territory and presently gains terrain in Iraq and capture Iraqi military equipment (that most probably will be used in Syria).

A military intervention itself cannot secure a long-term success, since it does not deal with the root causes of conflicts (as it is in the case of Mali, where the Tuareg rebels still revolt in the north, and the AlQaeda elements are being moved along the porous Saharan borders), and neither in case of Syria it can ensure any solution that would bring stability to the region. A „no-flight zone” and the air strikes against the regime as seen in Libya can indeed bring Assad down, yet simultaneously empowering well organized extremists elements in the fragmented Syrian opposition, that seek to establish a fundamentalist caliphate ruled on mediaeval precepts instead of a modern democratic state (preferred by the West).

In case of such complex, politically and militarily internationalized conflict possible positive outcomes of a foreign intervention are deeply limited and could only be considered as a last resort when either Assad or the violent extremists would significantly prevail, and most preferably should target the both aforementioned. In time of stalemate, that presently endures (in spite of some recent regime gains), the only use of foreign armed forces that would not deteriorate situation might be through a mutual agreement between the Assad regime and moderate Syrian opposition on introduction of UN peacekeepers.

Militarization of Border Control - Why Not?

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There has been militarization of borders since the end of Cold War. This trend has strengthened after 9/11, when borders have been highly securitized. Militarization of borders has been used in several meanings. Usually it refers to use of military organization and/or technology for controlling of the state borders. Fortification of borders by walls, fences and trenches are typical expressions of this tendency. It might also refer to more stringent policies, legislation, and law enforcement practices against immigration.

In academic literature militarization of borders has been widely seen as one of the dark side of globalization and securitization of borders. It has been argued that militarization lead to, in addition to unjustified harshness of border control policies and practices, secrecy of law enforcement functions endangering good governance and transparency of administration, thus probably jeopardizing travelers to get access of their constitutional rights.

Border control is basically law enforcement function to be performed by police. This basis has been highlighted in EU-Schengen Catalogue (2002) "External borders control, removal and readmission: recommendations and best practices", when striving to harmonize control of European external borders. Many new EU member states have renewed their border services and organized them according to civil (police) administration. This kind of reform has been made for example in Germany, Austria and Estonia. Finnish Border Guard is military organization under Ministry of Interior. In Finland there are no plans to reorganize the Finnish Border Guard according to common EU recommendations. So, it provides an interesting field of case study, does it affect, and how, when border guard is militarily organized in European context.

In this paper I will study and compare Finnish police and border guard as law enforcement authorities. Both organizations will be reviewed through good governance and administrative accountability. These common principles of legality are reviewed by studying complaints and appeals done by citizens against police and border guard. In addition, crimes done by both law enforcement authorities will be reviewed to form an opinion of common blamelessness of security authorities.

Against common expectations and academic writings on militarization of law enforcement, Finnish Border Guard proved to be more impeccable compared to Finnish police. There are very few complaints and appeals done against the Finnish border Guard compared to Finnish police. The same can be said against alleged illegality. Explanation for this surprising result may be found from history and military organization. Respect of law due to German legal tradition is deeply rooted to the Finnish administration. Military leadership and culture seems to account for, why in case of malfunction, new administrative practice can be immediately, and through the whole organization, be established for the new praxis of border guard. This cannot be said from police organization, where the same 'mistakes' continued year after year in spite of strong guidance from police management and Bureau of Ombudsman.

Jihad tourism in the refugee camps in the Horn of Africa as the challenge for the American and European armed forces

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According to The International Center for the Study of Radicalisation (ICSR) in London after the 9/11 attacks, refugee camps in the Horn of Africa have become the center for the recruitment of the refugees. At the same time they should be perceived as the link between the asymmetric warfare in Africa and in the West. What is more, over the years the growing tendency for the radicalization and recruitment has been observed among the refugees, IDPs and immigrants from Somalia and Ethiopia living in the United States or the European Union. It all has resulted in the refugee camps in this part of Africa being adapted as the training centers for the Westerners, especially those of Somali or Ethiopian origin who are often European or American citizens (ICSR 2012). Al-Shabaab has established their own recruitment strategy, strictly connected with their presence in so called new media: twitter, facebook or official YouTube channel of the organization: Al-Kataib. In the period of 2006-2012 there have been at least 1000 confirmed cases of the ethnic Somalis outside the Somalia as well as between 200 and 300 cases of the non-Somalis recruited to the organization. This phenomenon is often described as the so called *jihad tourism* which is gaining growing popularity among the Western Muslims (ICSR 2012).

The paper will be to examine the growing importance of the *jihad tourism* and the training provided by the asymmetric organizations in the refugee camps located in the Horn of Africa, especially in Kenya, Somalia and Ethiopia in the era of terrorism and counter-terrorism, COIN and peace support operations:

1. How serious is the threat?
2. Who are the potential recruits?

3. What are the links between Somali and Ethiopian diasporas in the United States, European Union and the countries of their origin?
4. How does the recruitment process and training look like?
5. What will be the role of the local (meaning Kenyan and Ethiopian) as well as American and European armed forces in solving this issue?

The proposed research is founded on both actors and institutional oriented methodology. An important part of the research will be completed by quantitative data derived from the indexes e.g. Human Development Index, Corruption Perception Index, Failed States Index, Index of Fragmentation as well as the reports and publications prepared by the various transnational governmental and nongovernmental organizations including UNHCR, ICSR, Heidelberg Institute for International Conflict Research, SIPRI or The Uppsala Conflict Data Program (UCDP). Methodology will be supported by the discourse analysis of the publications dedicated to the war and conflict in Africa (Williams 2011; Klosowicz 2013) and the interviews conducted with the representatives of the armed forces. Constructivism will be used as a theoretical tool while analyzing both the inside-outside and the outside-inside level which will be especially important while analyzing and researching links between the refugee camps in Kenya, Somalia and Ethiopia, asymmetric organizations, immigration in the western countries and the role of the American and European armed forces' response to the recruitment and training threats in the context of the regional security in the Horn of Africa, United States or the European Union, but also considering the global security (Wendt 1999).

Meeting the Operational Challenges of the *New Wars* of the 21st Century: A Ukraine Crisis SITREP

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Following the lessons-learned debates associated with COIN doctrines and practices, especially as the latter applied to comprehensive ISAF operations, the ongoing Ukraine crisis has reinvigorated assessments of the character and nature of New Wars (Kaldor 2012, Duffield 2014) in the current security environment. These wars find their center of gravity in issues of contested political-group identity, often involving transnational forces; as they play out, they bring to the fore irregular rather than conventional tactics; and, their financing is nebulous to the point of opaqueness, involving as it does funding from international criminal elements, often with State connivance or even active participation. In turn, analysis within the war studies literature has begun to focus more particularly on the relative effectiveness of a range of possible responses to conflict initiated and prosecuted in accordance with the recognizable rationales and *modus operandi* of the New Wars of the 21st century. Freedman (Survival, June-July 2014), for example, has evaluated the crisis-management dimensions of the diplomatic initiatives brought to bear on Ukraine conflict dynamics. Notably however, the tenor and near-consensus of security analysts addressing NATO's force-projection and reassurance ops in response to Russian-orchestrated tactics and manoeuvres has been to the effect that the Alliance and its security partners have been somewhat out-of-sync with real-world requirements. In this vein, the Financial Times reported that "it is NATO that is looking like it is stuck in the Iron Curtain era, as it tries to fly more planes, exercise more troops and sail more ships ever closer to Russia". (8 June 2014) This Paper, then, delineates the core features of the complex threat environment produced by the New War phenomenon as it is manifested in the current situation centered on Ukraine, reviews European and North

American military responses to the attendant crisis and armed hostilities, and concludes by setting out a series of tactical, operational, training, and resource-allocation measures designed to turn the challenges of the New War strategic environment into opportunities for the effective deployment of assets in the service of conflict prosecution and resolution. To borrow phrasing and echo wording from the Conference Statement of Background Information, the Paper both addresses the issue of current and 'future requirements and the possible role of armed forces' and 'tries to identify the security policy environment for future operations and missions'.

Dissecting Security Outsourcing in Canada's Expeditionary Culture: Afghanistan and the Future

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In keeping with the conference's focus on the roles, tasks, and expectations of/for armed forces in the coming years, the paper identifies that security outsourcing is now a fixture in the Canadian Armed Forces' (CAF) expeditionary operations. In August 2013, even with no substantial foreign military engagement underway, Canada's Department of National Defence initiated the second iteration of the Canadian Forces Contractor Augmentation Program (CANCAP). This represented an initial five-year obligation valued at CDN\$425 million for commercial support and logistics for expeditionary operations. Additionally, and stemming in part from the CAF's decade long efforts in Afghanistan, CANCAP II included security services as part of the larger contingency contracting suite. In short, CAF security outsourcing has shifted from "saving money" to "value for money" to "need to have".

To highlight the dynamics by which this private presence came about, this paper dissects the role of security outsourcing in the Canadian experience. This approach is grounded in the elements of, and frictions within, Canadian strategic culture. One can ask several questions related to strategic culture: In what manner does a state apply its armed forces? For what reasons does a state apply its armed forces? With whom does a state apply its armed forces? In answering these questions, the paper first notes Canada's longstanding proclivity towards expeditionary operations. Its strategic culture – an "expeditionary culture" – is informed by several tensions: 1) the CAF's relatively small size means that it usually must operate multilaterally; 2) there are debates as to whether the CAF should be peacekeepers or warmakers; and

3) Canadian military expeditions are frequently a matter of political concern, especially vis-à-vis Canadian unity.

The exploration of security outsourcing in this expeditionary culture consumes the paper's remaining four parts. It recognizes that security outsourcing has helped a constrained professional military to conduct long-term and substantial operations overseas. Second, it contends that security outsourcing allowed Canada to make a contribution to international security while at the same time helped to remake the CAF's image. Third, it contends that security outsourcing contributed to the political palatability of Canada's expeditionary operation in Afghanistan. The final and concluding part reflects upon what the future of CAF security outsourcing might entail given the Afghanistan experience and potential shifts in Canadian military engagement.

Working Group 2

Military History

Working Group Chair Report

Felix Schneider

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Although I was new to the ISMS, I have to personally admit, that I am really glad having had the opportunity to be amongst the participants. My special thanks go to Brigadier-General Dr. Feichtinger for the kind invitation and his confidence.

Everybody who expected Eric Sibul from the Baltic Defence College was deeply disappointed that he couldn't come, I'm sure - as was I, and I hope that you excuse that you had to take a chance with me instead as your chairman of the Military History Group.

I was told the annual meetings of ISMS have proven to be appropriate occasions for researchers from all over the world to work together, to communicate and to collaborate. Speaking of this special meeting here in Vienna at the National Defence Academy, I can confirm this to a very high degree indeed.

In the course of the conference we heard a lot of papers with contents representing a wide range of very different topics: At this point it's nevertheless not very realistic trying to give you a profound 2-pages summary of all what we learned in Vienna in our panels. In fact the lectures and papers given stretched like a rainbow from the snow-covered mountains in Norway to the jungles of Malaysia, from Total war in the Early Modern Period to US-strategic failure in The Gulf War of 1990-91:

Shaun Michael Allen from the University of Hull spoke on the training of the British Territorial Forces at the begin of the Great War while Jacob Barfoed from the Royal Danish Defence College gave us a lecture on the Supreme Command in the Gulf War of 1990-1991. Kimberly Brice O'Donnel from Kings College in London gave her thoughts to Military Working Dogs in the British Army – an exotic but nevertheless very interesting topic – while Weichong Ong from Nanyang Technological University focused on the second emergency in Malaysia 1968/69. The third panel consisted of lectures by Niels Bo Poulsen, the head of Centre for Military History at the Royal Danish Defence College Copenhagen, who spoke on the staff ride as a didactic tool in the Armed Forces of the 21st century and Fredrik Thisner from Uppsala University who focused on the question of a system for total war using the example of Sweden in the Early-Modern Period. The last speaker of the Military History Group was Gunnar Aselius, professor at the Swedish National Defence College Stockholm, who referred on Swedens last war that was fought some „incredible“ 200 years ago – the invasion of Norway in August 1814.

Anyway, all of these presentations fitted under the roof of our symposium: *Armed Forces of 2020 and beyond..* and one thing was common:

Focusing on either past, temporary and even future conflicts, the military historians among us have shown in this conference, that roles and tasks in the past are not so different from the job the modern soldier has to expect. From past to present to the future it was, it is and – in the last consequence - it will always be the personality and the morale behind the soldier that really matters on the battlefield!

In the beginning we were told by Professor Lindley French that „we need a revolution in Western Thinking about the nature of force“. I think, the only revolution we in Europe need is one that is very easy to achieve. All you have to do is visit a good library, go to the military history shelf, choose a good book on warfare - any good book – simply open it on any page and begin to read:

The message that you will find there is timeless and was once written on the wall some sixteenhundered years ago by a Roman guy called Flavius Vegetius Renatus: Si vis pacem, para bellum! If you want peace, prepare for war!

In the end I want to again thank all of our participants for their excellent presentations and their willingness to participate!

Were the Territorial Force sufficiently trained by the start of the Great War?: Are there any lessons for the Army Reserve and Future Reserves 2020?

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This talk will discover how well trained the Territorial Force (TF) were prior to the opening hostilities of the Great War, and whether their level of training mattered, in a strategic sense. At the formation of the TF (1908 – forerunner to the Territorial Army) the organisation's strategic purpose was obfuscated to such a degree that there were not many people, military or public, who knew their true intended purpose. Therefore, budgets were always tight resulting in training that became continually ridiculed, and subsequently suffering problems regarding their establishment which was never realised. Why was this so? Why did the TF find it sometimes difficult to reach the efficiency it and the government desired?

The new Army Reserve (AR), use the same framework of training as the old TF, and find themselves in a similar position regarding questions about their training and very poor numbers for recruitment. Can the TF's historical experiences help to inform the new AR today as they struggle to fulfil their Future Reserves 2020 commitments and fill the capability gaps left from the retrenchment of 20,000 regular soldiers?

The Failure of Supreme Command in the Gulf War, 1990-1991

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The purpose of grand strategy in war is to reconcile the military means with the other instruments of power towards the attainment of the political objectives and thus ensure that winning the war also leads to winning the subsequent peace. Therefore, seen in this perspective, a common trait to U.S. performance in recent wars is poor political-military integration in the practiced grand strategy. *Why doesn't the United States practice well-integrated grand strategy in war?* This is the puzzle the paper sets out to examine, using the Gulf War 1990-1991 as a critical case, a war, where the odds – diplomatically, economically, and militarily – were stacked in favour of the United States. The paper finds that poor understanding of the Clausewitzian theory of war and its implications for the practice of grand strategy actually characterizes not only much of the prevailing literature, but also the studied U.S. statesmen and soldiers, and the latter translated directly into political-military disintegration in the U.S. grand strategy for the Gulf War. The paper uses a Clausewitzian approach, which emphasizes the roles of leaders and strategists in the practice of grand strategy, and civil-military relations characterized by *an unequal dialogue*: a close, continuous dialogue between the president as supreme grand strategist and the military leaders, with the president encouraging and the military leaders offering candid advice, but always without questioning the president's authority as the final decision-maker. The paper discusses the extent to which the Gulf War grand strategy process adhered to a Clausewitzian approach and what this meant for political-military integration in the grand strategy. Overall, the paper concludes the Gulf War was characterized by *failure of supreme command* by President H.W. Bush. The single most decisive factor was the lack of a Clausewitzian grand strategy process aided by an appointed process manager and an unequal dialogue with the military leaders. This factor exacerbated the effects of all other found factors of disintegration. Consequently, as a way to

improve the U.S. practice of grand strategy in future wars, the paper recommends a Clausewitzian grand strategy process and an unequal dialogue.

The Staff Ride. Outdated relic or a useful didactic tool in the armed forces of the 21st century?

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In this paper the institution of the staff ride and its place in the system of formal and informal military education and socialization is analyzed. Based on the practices of the Danish Armed Forces, the paper is guided by the following research questions: What explicit and implicit purposes have staff rides served in the Danish Armed Forces over time? At what level and in which parts of the Danish Armed Forces have staff rides been used? What patterns of location, time period, themes and messages may be discerned? How have these patterns evolved over time and what is the current trend? Based on this, the paper will discuss challenges and opportunities associated with the current use of staff rides in the Danish Armed Forces. It will be argued that the use of staff rides in the Danish Armed Forces is under pressure for a number of reasons, including budget cuts, a new model of distance learning at the level of staff education, and changing perceptions of the role of officers. On the other hand, it may well be argued that – when properly used – staff rides offers a platform for discussion and reflection that is both holistic, tangible and combines theoretical insight with a hands-on approach.

Post-colonial COIN Learning: The Second Emergency in Malaysia (1968-89)

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In the post-1945 context, Charles Tilly's 'war makes states' thesis is perhaps more relevant to Southeast Asia than Western Europe. In the wake of imperial retreat and the rise of insurgencies, Southeast Asian militaries came to rationalise their internal security and 'development' roles as a form of 'new professionalism'. In time, the evolution of the post-colonial Southeast Asian state and its efforts to contain the insurgent became inextricably intertwined with the shaping of the state's political geography, institutions, strategic culture, values and world view. In short, counterinsurgency (COIN) became a nation-building tool and nation-building became COIN. The template, however, was one largely based on colonial COIN.

Since its independence in 1957 to the end of the Communist Party of Malaya's (CPM) armed struggle in 1989, the primary security concern for Malaysia has been the twin dangers of the communist insurgency and communalism. Having identified the primary security threat as being internally generated, the Malaysian government focused its efforts towards defeating the CPM through a 'comprehensive' approach enshrined in the national security concept known as KESBAN. The principles of KESBAN, however, are very much rooted in the COIN ideas and practice of the colonial Malayan Emergency years (1948-1960).

This paper argues that post-colonial Malaysia's 'comprehensive' approach in the Second Emergency (1968-89) – particularly the KESBAN doctrine is a case of how discriminate learning from colonial COIN was used as a template for post-colonial COIN strategy, doctrine and practice.

Military Working Dogs in the British Armed Forces

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In 1963, retired British Royal Army Veterinary Corps officer Brigadier J. Clabby, reflecting on the use of dogs during and after the Second World War, surmised that 'despite the breathtaking advances in modern armaments there will always be scope for the talents of trained dogs, no matter where the Army is called upon to operate.'

During the Second World War, the British War Office and Ministry of Aircraft Production each established training schools for canines. Dogs at the British Army's War Dogs Training School were trained for guard, patrol and mine detection duties. The use of mine detection dogs proved useful, leading to the employment of detection dogs in other conflicts, including Palestine, Korea, and Northern Ireland. Furthermore, guard and tracker dogs assisted British forces in Hong Kong, Kenya and Malaya during the latter half of the twentieth century.

As Clabby predicted, the British Armed Forces have continued to train dogs for military duties even into the twenty-first century. Whilst horses are no longer used on operations, the British military continues to employ dogs despite advances in technology and changes in warfare. In 2003, during the wars in Iraq and Afghanistan, the British Armed Forces included nearly 1,200 canines, and at present, the Army's 1st Military Working Dog Regiment employs around 200 dogs trained for guard and detection duties in Afghanistan. In 2013, the current Minister of State for the Armed Forces acknowledged the 'important and valuable service' offered by detection dogs. Furthermore, *Army 2020*, the detailed plan for the future of the British Army formulated in 2012, includes the continued employment of military working dogs.

The proposed paper will trace the history of dogs in the British Armed Forces, with particular emphasis on their use in the twentieth century, and consider the current and future employment of dogs for military service. It will argue that military working dogs have served an important purpose in the British military and will continue to do so in the future.

The following questions will be considered:

- Why and how were dogs used during the First and Second World Wars and other twentieth-century conflicts?
- How has the training and employment of dogs changed since the Second World War?
- What are the current and future uses of dogs in the British Armed Forces?
- How has the military working dog evolved to meet technological changes in warfare, and how do dogs compare to technology?

Working Group 3

Military Technology

Working Group Chair Report

No Chair Report Available

Harder than it Looks: Integrating UAVs into the American, Canadian, and Danish Armed Forces

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NATO nations are incorporating advanced technologies that enable military forces to find and strike targets precisely from great distances at little risk to themselves. Unmanned aerial vehicles (UAVs) represent the next step in modern airpower's long-range reconnaissance/precision strike complex and have transformed ground operations. They were not demanded until their worth was proven in recent operations—after 60 years of development. The experiences of the United States, Canada, and Denmark demonstrate why.

Preliminary concepts for unmanned combat and cargo aircraft

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Unmanned Aerial Systems (UAS) have in the past decades become indispensable assets for armed forces. In this paper, we discuss two new roles for UAS: tactical and strategic use against aerial threats, and transport of cargo.

UAS against air threats

UAS have major advantages over manned fighters for use against aerial threats. They can have better flight performance (i.e. maneuverability), be less susceptible to laser and directed energy threats, and can have longer range and better stealth for operations deep into enemy territory. Also, they can probably be made to take off and land vertically (VTOL) without significant loss of performance. Two main technical hurdles have prevented the introduction of Unmanned Fighter Aerial Systems (UFAS): lack of situational awareness of the ground controller and datalink latency and vulnerability.

We propose a system to mitigate these problems; the Semi-Direct Control System (SDCS). The controller gives intermittent instead of continuous inputs to the UFAS in the form of maneuvering tasks or relative position goals. An intelligent flight management system (FMS) then converts these inputs to inceptor commands. The controller is located in a Virtual Reality (VR) environment and receives synthetic data, video, audio and other sensory cues from the UFAS and other platforms. There may be a division of tasks between two or more controllers.

If the SDCS proves operable, it opens up new missions for unmanned aircraft, like air defense, cruise missile and UAS defense further away from home bases than is practical with manned aircraft, and escort for bomber, transport, tanker and AWACS aircraft, perhaps even in enemy territory. Other potential missions are: counter-air and interdiction deep into enemy territory for extended periods of time, and defense of groups of smaller ships by the use of VTOL UFAS.

Present-generation fighters like the F-22A have an edge over potential adversaries but will become more vulnerable in the coming decades, perhaps to a point where manned fighters are no longer an effective asset. The West has the time and resources to develop a generation of unmanned successors. Potential adversaries may develop UFAS as asymmetric force multipliers to compensate for their limitations in, for example, pilot training resources.

UAS for cargo transport

Unmanned Cargo Aircraft (UCA) do not yet exist (with the exception of the K-MAX small cargo helicopter) but they have huge military and civil potential. They can be made lighter, more aerodynamically efficient, and stealthier than manned freighters, can be operated efficiently with much smaller loads and can be controlled largely by people with little specialist training, making continuous, all-weather resupply of remote forces possible. Tanker variants can support UFAS and other UAS, even over enemy territory. This shows that combinations of types of UAS make new strategic and tactical missions possible. In this paper we outline some of the possibilities and challenges concerning military UCA. The availability of enabling technologies and emerging initiatives in development of civil UCA indicate that the time is right to consider the introduction of military UCA.

Future Design of Forward Operating Bases

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Throughout history, physical structures have been built to support military operations, whether it were encampments in roman times, castles in the dark ages or fortifications in the nineteenth century, engineering has always been part of military operations. Mostly, these structures were built to support a military strategy and to achieve operational objectives that followed from this strategy. Engineers carried out the design of these structures and the focus in these designs was on the support of (combat) units that were using these structures. In ancient times, the architecture of those structures was of grave importance because of the effect it sorted out on its surrounding and on the enemy (e.g. act as safe haven for the local population, radiate robustness and wealth on its surrounding, instill fear in the enemy) (Toy, 1955). Nowadays the operational effects that can be generated by engineering are often marginalized and are overshadowed by maneuver aspects of operations. As in the past, military structures still sort out an effect on its surrounding, maybe in modern warfare design has a bigger influence than ever.

Bases are designed to support the operational role of units deployed within it. Static, tactical bases are used to support a protracted presence of military capability at a particular location; they are the hubs around which forward operations are conducted. While some bases are established to provide indirect support to operations, such as logistical nodes, others are used as a local base of operations for combat troops (UK JTTP 4-05, 2012). For stabilization operations in particular, tactical bases are used to achieve the following operational effects: secure the population, establish a stabilizing presence and create local influence (US FM 3-24, 2014).

A main base, or sometimes referred to as main operating base (US), is a large, complex, static facility of which the location is determined by strategic or operational considerations. A main base is a permanent base with robust infrastructure. A tactical base is a static location of which the position is primarily influenced by tactical considerations such as the need to dominate key terrain, vital ground or provide logistic support to combat operations. A tactical base is used by forces to support their operations in the direct surrounding. A type of tactical base is the forward operating base, this type of base is used to plan, prepare, coordinate and conduct operations. A smaller sized base is the patrol base, this base is a location from which limited foot or vehicle-based patrols are launched. The term patrol base is often referred to as combat outpost (US).

This research focuses on the effect that the design of forward operating bases sorts out on military operations. The effect that these structures generated in former Yugoslavia and Afghanistan will be compared to the military strategy that was used for these missions to achieve the political goals. Gaps between strategically desired effects and effects generated by the design of military bases are in the heart of this research. This paper will address the question to what extent the initial strategic objectives have been achieved and what the contribution of the design of the forward operating bases was. Thereafter recommendations can be made regarding future design of forward operating bases.

The research will be carried out as a multiple case study from a Dutch perspective. Two major cases will be addressed: former Yugoslavia and Afghanistan. Both Yugoslavia and Afghanistan are modern-day examples of stabilization operations and in both areas of operations Dutch engineers have built a considerable amount of forward operating bases.

The central question for the research is: *In what way did the design of forward operating bases influence the achievement of operational goals during the Dutch missions in former Yugoslavia and Afghanistan? And how can this experience be used for the design of future forward operating bases?*

Technonationalism and Armaments Production in Asia

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The growing challenge to arms-producing states in Asia is balancing the demand for autarky – that is, self-reliance in arms production – with the growing technological requirements of next-generation weapons systems – and especially the demands of network-centric warfare (NCW) – which may be beyond their abilities to deliver on. While much of the world’s arms industry has to some extent embraced the necessity for “globalization” – that is, the creation of global supply chains in the development, manufacture, and marketing of weaponry – the Asian defense industry overall is perhaps unique in its persistence in following a decidedly *technonationalist* approach demanding self-sufficiency in armaments production. Among the nations in the region who do produce arms, there is an almost obsessive predilection for self-reliance when it comes developing and manufacturing arms, and consequently these countries have invested considerable resources into their defense technological and industrial bases. The dilemma facing these countries is whether such a go-it-alone strategy is still feasible – that is, can it build and sustain technologically advanced domestic defense industries? In other words, even if these countries are willing to pay the “technonationalist” premium for continued autarky, will it be sufficient for the task of developing and manufacturing next-generation weapons systems? This paper addresses defense industrialization among the leading arms-producing states in Asia and how the “technonationalist impulse” has not only driven defense industrialization in the region, but also how technonationalism has also provided a model for development (i.e., with the ultimate objective of autarky). It also discusses whether the technonationalist model is a viable or sustainable approach, in terms of economics and (especially) military innovation.

China's Approaches to Cyber Security: Conceptions, Strategies, and Debates

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Cyber security challenges, primarily in the context of strategic competition in cyberspace, are now the subject of considerable attention worldwide, including China. Contrary to reports in the popular Western media analyzing emerging Chinese cyber capabilities, there has been a little understanding of actual Chinese perspectives, strategies, and debates on approaches to cyber security.

In this context, this paper will provide an overview of Chinese conceptions on the (1) definitions of cyber security; (2) evolving cyber conflict spectrum; and (3) future strategies. Relying on a mixture of authoritative (government), semi-authoritative, and non-authoritative sources, the paper will highlight varying Chinese perceptions and challenges in defining and implementing a single coordinated policy approach to cyber security. It will argue that China's path and patterns of cyber security resembles a fragmented experimentation phase, with different military, intelligence, and civilian organizations pursuing different strategies in cyberspace to protect their interests. At the same time, however, China's institutional divergences in devising an integrated cyber-security strategy converge in the agreement that the nature of global cyber threats, particularly by foreign governments, pose challenge to China's state sovereignty and government's ability to ensure socio-economic stability.

Artificial (Intelligent) Agents and Cyber Defense: Policy Implications

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This presentation will examine the implications of employing artificial (intelligent) agents for cyber defense measures. The presentation will highlight many complex cyber-related challenges that are solved by applying artificial intelligence (AI) tools, particularly since intelligent malware and new advanced cyber capabilities are evolving at a fast rate and intelligent solutions can assist in automation where pre-fixed automation designs are insufficient. Intelligent agents potentially underpin solutions for many current and future cyber-related challenges and AI therefore plays a possible role as one of a number of significant technical tools for cyber defense. However, the presentation will consider that although advanced solutions are needed, many technical and policy-related questions still surround the possible future consequences of these solutions, in particular the employing of fully autonomous intelligent agents and possible disruptive technologies that combine AI with other disciplines. While these AI tools and actions might be technologically possible, the presentation will discuss a number of significant policy gaps that arise such as legal question marks, ideological and ethical concerns, public perception issues, public-private sector ramifications, and economic matters. It will highlight several areas of possible concern and conclude that it is important to examine further the implications of these rapidly evolving developments. Finally, several policy options will be provided as a start so as to begin responsibly shaping the future policy landscape in this field.

Experimentally developed model for the design of protective measures against shaped charge jet penetration during EOD operations

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The wide use of light anti-tank weapons, such as rocket propelled grenades and the scattering of sub-munitions lead to a great number of explosive remnants of war (ERW) containing shaped charge warheads in different conflict areas. A serious problem is that, the explosive ordnance disposal (EOD) personnel lack adequate means for the design of protective measures against the jet from clearance of shaped charge ammunition. In this paper, based on a master thesis in military technology, a previously suggested calculation model², is developed further. The objective is to create a tool that can be applied to EOD operations and meet military requirements by consideration of the limited information availability, the short time frames, the working methods and the technology level that are characteristic for such operations.

Full-scale experiments have been conducted to clarify the effects of conditions that are typical for EOD operations: protective measures built from sandbags with a long standoff distance to the ordnance. The results indicate that the hydrodynamic penetration theory is not suitable for these conditions, and,

² Johnsson, Fredrik, “Shaped Charge Calculation Models for Explosive Ordnance Disposal Operations”, (“Beräkningsmodeller för riktad sprängverkan vid ammunitionsröjning”, in Swedish), Stockholm, Swedish National Defence College (SNDC), Stockholm 2012.

furthermore, that a sandbag construction provides significantly better protection against the jet than a homogeneous gravel construction.

By disturbance analysis, the sensitivity of the individual parameters in the model is studied for typical errors. Subsequently, Monte Carlo simulation has been used to analyse the cumulative effect these errors can cause. The simulation results have then been the used to determine the model's margin of safety.

To achieve the desired military utility it should be possible to use the model under field conditions, with limited time frames and without access to advanced calculating means. This has resulted in a simple diagram included in a complete design tool. It is proposed to implement the tool in regulations and curricula for EOD operations in order to remedy today's lack of decision support.

Working Group 4

Command and Control, Leadership and Basic Competence

Working Group Chair Report

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In the working group four on leadership, command and control and basic competences we had eight very interesting presentations. These presentations were divided into three different areas which we dealt with in different sessions. The central theme which connects all these presentations are risks and their management.

In research literature there has been a lot of discussion about what resilient organizations, communities and societies are and how we can prepare them to become more resilient. In this context resilience means, how we can adapt, deal and bounce back from adversity. This also includes risks or crises and how we try to manage or lead them as well as how we try to be prepared for them.

One crucial part of this risk management is how an actor or leader makes sense of the situation to make appropriate decisions. We know from research literature that certain critical human factors restrict the decision making process in dynamic and complex environments. These human factors limit our capacity to acquire and interpret information from the environment to form situational awareness and mental models, which could lead into decisions.

On the other hand, it is not enough that we concentrate just on sense-making or decision making processes. In our group we discussed the managerial problems. We have to lead people and processes as well as to put them into practice. The situational awareness theory concentrates mainly on the human

weaknesses in decision making but not so much on these managerial challenges.

In the work group we also discussed the intelligent technological systems with which we try to overcome the known defects of human information-processing abilities and behaviour. With these meta-systems we can integrate various approaches and procedures for example for disaster classification. These systems help us to analyse potential risk factors and their dependencies. They also help us to identify scenarios which facilitate the gathering of relevant information for the decision-making process. These systems provide a possibility for decentralized, collaborative interactive decision making and make “a shared risk awareness” available for the decision makers. In this sense situational awareness or picture is not necessarily acquired immediately but instead it is built up over time in cooperation with the relevant authorities.

In the work group we had presentations, which looked to the future. One of the most challenging tasks is to forecast the future and try to prepare for that. We don't know in what kind of environments we are supposed to function, we don't know precisely what are the risks towards which we should be prepared and we don't know what kind of technologies we will have. We can try to foresee these challenges with scenarios, long-term strategies and intelligent technologies. However, we cannot forget training and education. At the same time we have to educate and train individuals, teams and networks, so that they are prepared to function properly in the future, multinationally in cooperation with each other.

A New Understanding of Military-/Leadership³-Science as the Basis for the Strategic Alignment of Armed Forces for 2020 and beyond, and as a Contribution to the Strategic Goal Definition of the Democratic State

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The EU is about to reap the negative consequences of a power vacuum that it has created itself, by hasty use of the peace dividend after 1991. In fact, Europe needs access to vital resources abroad, i.e. the capability to (maritime) power projection. It must be able to protect its new members reliably, also by military means in order to maintain coherence, especially when the United States shift its strategic focus to the Pacific area. However, a strategy that pursues these goals, is still missing - and even if such goals were defined, the political will would be lacking to make the necessary resources available in the medium term. If Europe agreed on a common strategy in the above sense, then it should aim at the lowest possible losses in the implementation-phase of this strategy, which would require high technology in the defense sector on the one and soft-skill-based leadership-superiority on the other hand.

This presentation tries to prove that Military-/Leadership-Science in a new understanding, can provide the necessary basis in order to:

- create a soft-skill-based leadership-superiority of armed forces for 2020 and beyond,

³ Leadership in a broader sense (“organic leadership”) is understood here as a systemic network, comprising the components strategic goal finding, operational planning, tactical implementation/C4I, leadership in the narrower sense, management/administration and process-accompanying controlling within the armed forces.

- to anticipate scenarios where access to abroad and vital resources is at risk or where defense guarantees for new members must be realised,
- to accomplish a scientifically based operational contingency-planning regarding these scenarios,
- to develop tactical and operational decision making processes that promise success at lowest possible losses,
- to recognize new military challenges, to define roles/role profiles and tasks and to align, structure and equip future armed forces accordingly (scientific quality of defense planning and force planning within the MoD),
- to make a military contribution to the comprehensive, strategic goal-definition of the state (this would include approaches towards political consulting and the research of conflict causes as well as of options regarding war-prevention)

Military-/Leadership-Science in a new understanding can - in contrast to the previous – be characterized mainly by the fact that research and teaching on a scientific level and in an institutionalized form is performed also in the military-scientific core subjects strategy, operations, tactics, general leadership doctrine, logistics and polemology⁴ (which hitherto mainly was done in the field of military-scientific, subsidiary subjects), that the results of the subsidiary subjects are aligned towards the objectives of the core subjects and that the discipline is structurally anchored at tertiary military educational institutions. Thus Military-/Leadership-Science gains its unique selling point and can simultaneously achieve a comprehensively usable peacetime-benefit.

Such an understanding of Military-/Leadership-Science might - according to the metaphor of the tree before winter - allow to contain the lifeblood, i.e. the intellectual soft skills of military leadership-doctrine within the trunk, whereas the leaves, i.e. technological hardware and armament that cannot be maintained due to shrinking budget, are thrown off and eventually to sprout anew when

⁴ Understood here primarily as the research of war-prevention options.

the security-political situation should require it. Abstractly spoken, could the time-span, in which the demand for a new strategy and for the required budgetary means, is not yet perceived in political reality, be bridged by the preservation and development of those soft skills that are indispensably needed for a grow-up in numbers and capabilities, in case of re-emerging threat.

Particularly smaller states, with a strong humanistic educational background and with an Enlightenment-influenced systematically refined leadership-philosophy, could play a leading role in the development of a military-science in the above new understanding and the establishment of a therefrom derived general leadership-science, whereby they also could make their solidary contribution to the European security-political development.

Using C2-theory for a deeper understanding of managerial problems during the 2011 Norway attack

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At 15.26 on the 22nd of July 2011 a lone wolf detonated a bomb made of fertilizer and fuel oil in the government quarter of Norway. The bomb killed eight people and injured over two hundred. Less than two hours later the same man, wearing a homemade police uniform, arrived at the island Utøya and opened fire at young participants engaged in a yearly summer camp and killed sixty-nine of them.

The tragedy was the deadliest attack in Norway since the WW2 and called for a massive societal response involving numerous of different resources dealing with various individual and societal needs. Some needs were acute and had to be dealt with immediately, e.g. stop the ongoing massacre, triage, etcetera. These needs had to be considered from a short-term time scale (minutes to hours). Some needs emerged as a consequence of the initial attacks and their effects, and had to be approached from a mid-term time scale (hours to days), e.g. health care logistics, analysis of further development, etcetera. Other needs emerged over a longer time scale (days to years), e.g. psycho-social needs, media management, dealing with possible distrust of authorities, etcetera.

This paper utilizes theories from the field of Command & Control in order to analyze managerial problems and challenges associated with working with the short-term and the mid-term time scales. We compare how the level of situational awareness⁵ (Endsley) on events relevant for the two time-scales

⁵ Endsley, M.R. (1994) *Situation awareness in dynamic human decision making theory*. In *Situation awareness in complex systems*: proceedings of a CAHFA conference, ed. R.D. Gilson et al. Daytona Beach, FL: Embry-Riddle Aeronautical University Press.

develops. Furthermore, we relate this to products in Brehmer's DOODA-loop⁶, e.g. to the situational picture (the product of the data collection function) and the understanding of what needs to be done (the product of the sensemaking function). The analysis is made both on the C2 system as such (i.e. how the crisis management was designed to function), and on the actual functioning of the C2 during the crisis. Finally, we compare the preliminary conclusions from the study with general managerial problems associated with major civil and military operations.

The analysis is made based on secondary data from the comprehensive report from the 22 July commission in Norway and a Swedish report focusing on the healthcare system. This means that our contribution has to be seen as an exploratory effort containing preliminary results, rather than definitive. The purpose of our preliminary work is to (1) examine the potential of the theoretical approach (2) improve the understanding of challenges associated with management of complex response operations and (3) based on the preliminary results suggest possible system improvements.

⁶ Brehmer, B. (2007) Understanding the functions of C2 is the key to progress, *Int. C2-journal*, Vol. 1, No.1.

Team Learning and Leadership in a Military Staff Exercise

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A case study of team learning and leadership in a multinational section Military cooperation in multinational operations has become one of the main tasks for the Swedish Armed Forces. To develop and enhance necessary working knowledge and skills, the Swedish Armed Forces and Swedish National Defence College organize annual international staff exercises with the purpose of teaching and training officers to carry out effective staff work. The aim of this case study is to gain a better understanding of factors that enable or hamper team learning within a military staff exercise. The theoretical base is Amy Edmondson's model for studying and analyzing team learning. To gain a broader understanding of factors that might have important influences on team learning we added the two factors of cohesion and defensive routines. This case study shows that the revised team learning model generated new and important perspectives and insights on factors that can enable or hamper effective team learning within a military staff exercise.

A Meta Risk Model for Supporting Interactive Decision Making in Situation Awareness Centers

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Introduction

In this paper we introduce a meta risk model enabling an abstract view of risk management in general. The underlying open world assumption and the structured method of applying the model allows to consistently integrate various approaches and procedures for e.g. disaster classification, involved roles like first responders, local government, military or administrative personnel. Starting with the recently developed IT-specific model of RiskSense [3], which is using the catalogues of the German IT-Grundschutz, we provide a new possibility for interactive decision making, especially for the needs of Situation Awareness Centers (SAC). In this context, first responders can quickly and effectively gain necessary insights into potential risk factors and their dependencies. Additionally using the structured procedural Z-Model [14], information is gathered and analyzed to identify scenarios, feeding the functional meta risk model to enable transparent decision-making.

State Of The Art And Frameworks

When analyzing the current state of the art in knowledge management, risk analysis, IT-related frameworks, and management disciplines a large number of different risk management and assessment models, methods or at least aspects can be found. Those are coming from frameworks or standards like ITIL [1], COSO [10], COBIT [6], IT Grundschutz [4], ISO 31000 [9], ISO 27005 [5], OCTAVE [8], NIST [7], etc. Furthermore, examining Austrian and European Union legislations (e.g. enterprise law, share law, Solvency II, Basel III, 8th Audit Directive, anti-money laundering directive etc.) as well as scanning for particular risk aspects of motivation, fraud, and business models in the area of social science it can be found that in many cases the so called risk models or

risk aspects are sometimes only reduced to the minimal conclusion “risk management has to be applied”, without a further description of how this could be achieved or a reference to one of the frameworks or standards mentioned above. In fact, all risk management models tend to follow a quite similar but not a real common approach.

Consequently, the suggested meta risk model will address the problem of inconsistent and isolated, highly domain-specific models, originating from the lack of a generic risk management approach. Therefore, we used RiskSense [2] as the framework for a situation awareness platform and integrated supporting models like the Multi-Layer Multiple Vector Model [12][13] or the Z-Model [14]. Additionally, we focused on human risk factors to be integrated into the meta risk model to support scenario analysis by covering social science factors.

Prototype (Risk Sense)

In RiskSense [2] Stefan Schiebeck implemented a risk management approach and set up a supporting prototype on the commonly accepted structured model of IT-Grundschutz, allowing the identification, estimation and modeling of dependent organizational assets, protection criteria, threats, safeguards and roles. The main motivation was to provide a simple web tool to support collaborative, interactive decision making. It can be applied as an interactive decision support system aimed at efficiently performing risk management tasks. The method and supporting software prototype has been extensively evaluated by the Austrian Federal Ministry of Defence and Sports and showed high potential for operational deployment.

Underlying Concepts And Models

Furthermore, with the Multi-Layer Multiple Vector Model [12][13] as a basic classification scheme, the Z-Model [14] enables a comprehensive scenario planning process, leading to a functional meta risk model. The developed concept for a generic meta risk model includes all aspects of the studied approaches, methods and models by setting up a general conceptual level. Any specific model should be considered as a particular version of the generic meta model, using a common data representation. By doing so, we harmonize the

core aspects and prepare them for a standardized treatment. The ultimate objective is to develop a robust model which can be flexibly applied for different purposes and by different roles.

Further Work And Outlook

The “Meta-Risk-Approach” allows to take several models, abstraction layers and parameters into account in order to provide a function-oriented meta risk model. Currently we plan to develop the specifications behind the described high-level processes, their interactions and resulting requirements.

The basic demonstrator requirements are aligned with the RiskSense prototype, allowing the integration of sensors and expert knowledge into the meta risk model. The resulting software demonstrator is planned to be evaluated in the context of Situation Awareness Centers (SAC) by the Austrian National Defence Academy, which is supporting the Austrian Armed Forces in providing domestic aid in the case of natural catastrophes and disasters.

The overall goal of our research concept is the advancement of existing situational reporting capabilities already implemented in RiskSense, by incorporating additional modelling options based on human factors and strategic long-term scenario planning as provided by the Z-Model. Therefore, the meta risk model enables a comprehensive, scalable, generic and domain-independent risk assessment for all layers and parts of an organisation to develop, implement and enhance a common and advanced risk management as basis for a “shared risk awareness”.

‘Emphasizing STARC’! Suggested future ways forward for contemporary military and special operations intelligence and knowledge work

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This paper outlines a proposed interconnected analytical framework and series of concepts for furthering the conduct of military and special operations-related intelligence and knowledge work. Particularly this is as events and developments unfold in contemporary globalised circumstances. Building on ‘System of Systems Analysis’ (SoSA) approaches, a joined-up comprehensive systems-based approach is advanced. Thereby, greater contextualisation potential is also offered by what this paper seeks to communicate.

As this paper goes on to argue, the above SoSA work is undertaken to help with subsequent ‘System of Systems Engineering’ (SoSE) efforts. Those last SoSE efforts would be recognised as ranging from moving on from attaining merely ‘situational awareness’ to ‘mission accomplishment’ by transforming events and developments.

Throughout the paper, it observes that a close eye needs to be maintained on the sustained delivery of core intelligence requirements of ‘getting the right intelligence/information, to the right person/people, at the right time’ (‘3Rs’), as well as on continuing to simultaneously meet and consistently maintain over time all of the highly-pressing customer/end-user intelligence delivery criteria of ‘Specificity, Timeliness, Accuracy, Relevance and Clarity’ (‘STARC’). These qualities are held to be especially pressing requirements during our contemporary ‘Big Data’/‘Cyber’ age.

In its conclusions, this paper has been designed to offer suggestions with potential viable utility for being applied in military and special operations intelligence and knowledge work - however precisely that work is configured, calibrated or scaled. That work is seen to be especially pressing while practitioners strive to navigate the demands generated by negotiating the conduct of several multi-functional operations (MFOs), ranging from 'war' to 'peace' and covering the full-spectrum of diverse concerns currently confronted, not least during an era characterisable as one of strategic globalised risk (GSR) involving much uncertainty. Ultimately, the paper asserts that a constant feedback process of 'context appreciation' and 'solution fashioning' emerges as important and is deserving of re-emphasis.

How to consider experiences of the researcher in scientific research?

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As a part of my doctoral studies, the aim of this paper is on the meaning of experiences the researcher gets while observing the research object or phenomenon as a part of ethnographic study of organisation culture.

There has been surprisingly low consideration of researcher's experiences that are based on her or his life situation in ethnographic studies. This kind of experiences and observations rebuild a person both in working life as a researcher as well as in the other areas of life. New experiences and observations build on the earlier experiences as well as reshape them. So the earlier experiences are in continuous interaction with newer life situations.

In ethnographic study the researcher has to be able to evaluate how the experiences among study effect on her or his observations and on the intuitive decisions based on them. Thus the challenge is on the visualisation of the building process of consciousness: how it should be shown in research papers and how does it effect on results of a study. While rebuilding a vision of reality researcher has to be satisfied on extra understanding of a phenomenon instead of absolute truth.

While studying own organisation special challenge is the fact that the researcher has assimilated the policy of the organisation as well as the way of thinking and observing life situation at hand. On the other hand based on the earlier life situations she or he is able to focus the study to the areas which can be disregarded from outsider.

Air force organisation culture includes phenomena of which recognition benefits the knowledge of organisation. Long term experience increases researcher's intuitiveness and understanding. This was seen especially in field research, where observation plan proved to be restrictive. Lead by intuition I found significant situations for my research. These kind of experiences and observations of research process strengthen belief and awareness of the researcher during the process.

Air force organisation culture is unique differing from other branches of military. This is explained with flying fighter plane. Experience study might have new opportunities in this area. Fighter plane flying includes a lot of extreme experiences which seem to be transferred partially consciously and unconsciously to younger members of the organisation. This process of the transfer is one structure of organisation culture.

Institutions and Leadership: Doing “Things Right” Or Doing “The Right Things”?

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Peter Drucker famously noted, “Management is doing things right; leadership is doing the right things.” In this theoretical paper, we assess the relationship between institutions and leaders. We understand their relationship through Drucker’s metaphor; replacing ‘management’ with institutionalised processes. We draw our theoretical insights primarily from the contexts of military operations and national-level leadership. In the military context, there are two prominent types of evaluating the performance of any system: the measure of performance (MoP) and the measure of effectiveness (MoE). Strong and visible commanders are typically represented as the embodiments of the leadership aspect of the matter (MoP), whereas his or her headquarters play the managing role of the, engaging in planning, operations and control (MoE). We observe several collisions of managerially driven institutions and charismatic leadership. Thus, we address the series of questions of legitimacy and desirability of leadership practices in institutional contexts.

The institutional reading of leadership provides a way to understand the role of emotions in how organizations work, one instance of which can be read in the ethnographic study of institutional recoupling of concepts and practices (Hallett, 2010). In fact, the tension between strong, charismatic leadership and the ‘iron cage’ of institutions enables us to see the particular institutions in the first place – the existence of charisma and institutions is written inside their conflict. This view is closely associated with the discussion of ‘institutional politics’, in which “the interplay of institutional control, agency and resistance in organizational fields” help in exploring the relationship between power,

institutions and organizations (Lawrence, 2008) – as well as understanding the role of emotions in institutional work (Voronov and Vince, 2012). Recent development of Russia is our national-level example. The dispersed Russian opposition is struggling to develop a concise agenda and thus attract followers. As the society has not widely embraced the Western values of plurality, democracy and individuality, they do not ‘work’ in the context of Russian political institutions – continuing the authoritarian leadership over the Russian population.

Moreover, why are normative measures (such as MoE and MoP in military context, or ‘accountability’ in the school context, studied by Hallett) often given the priority in assessing the state-of-affairs on institutional fields? Is this a form of institutional ‘cowardice’ that manifests itself in always “playing it safe”? Why is initiative-seeking leadership often socially sanctioned – to the extent of actively avoiding charismatic leaders in organizations? In the conclusion of the paper, we argue that strong emotional appeal grounded in the cultural environment of the leadership context helps leaders to overcome institutional control.

Working Group 5

Law and Ethics

No Chair Report Available

Rules of Engagement – Research Project Development

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Rules of Engagement – Aspects of International and Domestic Law when applied in peace striving [military] operations under UN-mandates – A Nordic perspective

In international peace operations Swedish military units, along with forces from other states, abide by so called Rules of Engagement (ROE). These ROE have come to existence based on not only legal but also on political and operational aspects. In Sweden, ROE's did not exist in the national military context until very recently why they are not yet an everyday occurrence in the same fashion as in peace operations and in other military operations where coercion and use of force may be applied. As a politico-military steering instrument often negotiated at grand strategy level troop contributing countries may have influence on the rules, at least is if being a member of the leading organisation running the operation with proxy from the UN. Someone who has less or in reality no influence on the rules themselves is the soldier that in the field, in the air or at sea needs to apply the implemented ROE. In fact, his or her position constitutes the background of the project; although soldiers should be able to trust the provided ROE and act according to them questions have been raised such as whether or not it is enough for them to rely on the rules only. In other words what is the status of the ROE?

Following this the main challenge and the purpose of the thesis is to discuss the [legal] status of the ROE in relation to the law, basically national but also international law. Thus the research question of the project deals with the position of ROE in Swedish law and in the legal system of some other nations having a similar approach to peace operations, such as the Nordic countries.

The issue is perceived to be process driven as it focuses on for instance the drafting process and hierarchy of norms.

Another challenge is how to ROE relate, or correspond, to established systems of inter-national law, mainly UN Security Council resolutions mandates, International Humanitarian Law and Human Rights Law. This issue is more substance driven as it focuses on the content and the application of ROE more in detail. Although extracts from practice (empirical approach) is desired secrecy aspects related to real operations cannot be neglected. And although application of hypothetical cases could possibly circumvent the secrecy aspects it is likely this issue only briefly will be covered in the thesis however not reach the level of answering a contemplated second research question.

The Commander-in-Chief in legal system of the Republic of Poland

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The Commander-in-Chief of the Armed Forces in the Republic of Poland shall be appointed in certain situations - for the duration of the war⁷ and (sometimes) in the martial law⁸. This paper will describe these situations and analyzed the provisions of this forming, especially in the case of the martial law.

The author tries to answer the question, when the Commander-in-Chief should be appointed? Does Commander-in-Chief have to be appointed in every time in martial law?

In the Polish legal acts are some shortcomings in the rules. Sometimes also the law is unclear on this matter and this is a problem, particularly in terms of interpretation. It is the reason, why the author will mention of some legal definitions. In legislative acts and the most important documents in force in the Republic of Poland there is a multitude of formulations the multiplicity of concepts or inconsistency of their use. Absence of some definitions will increase the problems associated with their understanding. This creates a situation in which through lack of regulation may have many interpretations. The Polish legal acts most of the problem creates the concept of "war", which

⁷ *Polish Constitution*, art. 134 „[...] 4.. The President of the Republic, for, shall appoint the Commander-in-Chief of the Armed Forces on request of the Prime Minister. He may dismiss the Commander-in-Chief of the Armed Forces in accordance with the same procedure [...]”.

⁸ *Martial Law Act*, art. 10 “1. If at the time of martial law, there is the need to defend states, Polish President directs the defense in cooperation with the Council of Ministers. 2 President during martial law, in particular: (...) 4) may appoint, at the request of the Prime Minister, Commander-in-Chief of the Armed Forces (...)”.

must be distinguished from the "state of war" or "time of war" and, above all, the "martial law". These definitions and its proper interpretation is such important in case when we should or just when we can nominate the Commander-in-Chief.

The article describes the hierarchy of legal acts, which is output to a discussion about the possibility of the appointment of the Commander-in-Chief in certain situations. Then, analyzes both the nomination: during the war and in the martial law, and the possibility of calling in other situations.

Neuroanthropology and the military. Perspectives, applications, controversies

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As we are entering the golden age of brain research and the Biotechnological Revolution in Military Affairs, security and defense communities start exploring the cognitive area of human activity. The upcoming scientific breakthroughs that enable to crack, model and alter the functioning of the brain, will vastly change the way our militaries work. Brain research, however, due to numerous limitations, does not cover the complexity of the mind, and the cultural variety of the individuals involved. Thus the field of neuroanthropology evolved, as an interdisciplinary science that is to bridge those gaps. The interdisciplinary approach offered by neuroanthropology enables us to:

- Understand the interaction of human brain and culture, and hence the implications for mind functioning and behavior determination in a variety of settings and circumstances,
- Determine the role of the nervous system and cognitive processes in creating social structures, constructs and behaviors,
- Bring in significant advancements in human science theory.

It is of particular significance to the armed forces, since it can help explain and enhance solutions for such diverse issues as cognitive abilities of soldiers, influence of combat conditions on cognition, PTSD, perception of threats, PSYOPS or functioning of cyberspace. Moreover, armed forces operate between pre-modernity and postmodernity. Our armies will be affected by the resulting human advancements, transhumanist ideas and singularity, at the same time having to perform their duties in societies that evolve in a completely

different manner, without much regard for technological and civilizational developments. Neuroanthropology offers tools of bridging those gaps. The possibilities were partly acknowledged by DARPA in such projects as SyNAPSE or Narrative Networks which explore the potential of joining cognitive and cultural determinants of human behavior.

However, only a limited amount of other research has been performed and reported on in this aspect. The aim of the presentation and the following article then, is to expand on the added value of the neuroanthropological research for security and defense purposes, and to discuss controversies that result from the application of the current and future findings in the field that might lead us to a situation in which winning “hearts and minds” will no longer be a metaphor.

Liberal and Light-Nihilist Peace: Two sides of the Same Coin?

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In this paper I will discuss the approach to so-called peace making from the end of the Cold War and until now “performed” by the Euro-Atlantic states. My overall thesis in the paper is that the pattern that we can see in this period sits well with a description of the same states as light-nihilist states/societies. The premises for my argument are 1) the pattern of war and warfare has been one that increasingly blurs the difference between war and peace, meaning that “peace” involves a more “militarized” peace (“we” are always militarily committed somewhere), or, conversely, “war” becomes “pacified” (it takes place “there”, not “here”). 2) By the term light-nihilist, I refer to the figure who, in line with Nietzsche’s “last man”, has given up all his values in a world that he cannot escape. However, the politically correct light-nihilist still claims to have “values”, but is at the same time paying lip-service to his acclaimed values (e.g. the value of “peace”). Hence, whether he actually possesses these values is an open question. These premises are the lenses through which we can observe late modern warfare in the period after the end of the Cold War, and how it has been *received* by the Euro-Atlantic public. Central in this analysis are the assumptions (and connections) between the emergence of the post-political society, and the indifferent (Western) public attitude to the fact that “we” are constantly at “war” somewhere (“indifferent” as in neither hostile nor enthusiastic). My speculative and (hopefully) provocative conclusion is that this indifferent attitude toward war could/should be interpreted as a symptom of a Western light-nihilist culture. From this, we may want to ask the question on whether peace activism should focus on the possibilities for anti-nihilism (or perfect nihilism), instead of only focusing on traditional anti-war activism/liberal peacemaking? By this I indicate that the idea of a liberal peace

is light-nihilistic in the sense that it is 1) only “fixing” a symptom, not changing the underlying causes that led to the war in the first place (“we” want peace, but “we” don’t want it) and 2) sits well with the “middle of nowhere” approach of light nihilistic cultures. The latter point refers to the classic Western notion “that we have to do something” when faced with images of the cruel faces of war, meaning that the option of “doing nothing” is deemed “politically incorrect” (after all, light nihilists do have values, helping the less fortunate being one of them!). Neither does the other possible option sit well with light-nihilist culture, namely to intervene properly and, in a “good” old fashion, colonize “the brutes” and (re)shape them according to western values (after all, the value of self-determination has to be upheld, and “colonization” by force is an inhuman practice of the past!). Hence, the “flat” middle road seems to be wars fought in the name of a “flat”, symptom alleviating “liberal peace” that is mimicking the current trends of late-modern war and warfare; a sedated condition of neither peace nor war.

Working Group 6: Security and Defence Policy and Strategy

Working Group Chair Report

Jürgen Wimmer

**Institute for Higher Military Command, Leadership, and Management
Austrian National Defence Academy**

Thomas Pankratz

**Institute for Strategy and Security
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Seven presentations were given to a broad variety of topics like:

- Strategic level analysis tool for the security sector
- How strategy can be mastered
- Denial of access concepts of the Vietnamese navy
- Impacts on globalisation on modern navies
- Chinas sea-based nuclear deterrence policy
- Singapore's security and defence policy
- Baltic states membership in NATO.

During the presentations, the intense and inspiring discussions, and especially due to the inhomogeneity of the presentations, two aspects turned out to be essential:

1. For an accurate understanding, analysis and interpretation of current and especially future security relevant topics and developments - especially the

future behaviour of security relevant actors - it is quite essential to have a certain framework for orientation. Strategy, respectively the core elements of strategy - ends, means and the strategic environment - can provide such a framework. In any security discussion it is relevant to point out the aims ("ends") of an actor as well to analyse the ways and instruments ("means") by which the actor will achieve its aims. And it is also essential to understand, how the actor interprets his environment. This interpretation will always be based on a constructivist approach.

It is not sufficient to point out ends, means and the strategic relevant environment, but it is also important to make a sharp differentiation between these elements, especially regarding ends and means. If we don't make such a differentiation, we will mix up these elements. And this will lead to a huge confusion in the debate.

This is not only true for other actors but also for oneself: It is important to be aware of the own strategic relevant environment, in which potential threats and/or challenges are located, in which also the other actors, with their aims, are located. It is essential to know the one potential ways and instruments, especially the limitations of these means. And finally, perhaps the most important point, and at the same time the most difficult point, is to identify and formulate the own aims.

2. For a coherent security debate it is essential to define the core strategic elements and their correlation. But it is also important to define what we understand by security or security policy. Do we understand security policy as defence or military policy that means do we define security predominantly in a narrow sense? Or do we understand security policy in a wider, comprehensive sense, like we do it e.g. in AUT?

There are hundreds of definitions of security and security policy, but this does not matter. What really matters is that before entering the discussion we should know what we are talking about. Otherwise we will discuss on different levels. And the result will be confusion again.

Confusion on the strategic level as well on the security policy level is the last thing we need facing the complex present security environment and the more

complex environment in future. And confusion is the last thing we need thinking about the future role of armed forces.

Beyond strategic culture: strategic level analysis tools for the security sector

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The main aim of the conference presentation and article, is to introduce the strategic cultures interaction model designed by the Author. It explores the possibilities of applying cultural analysis theories and methods as strategic level assessment tools for security and defense purposes. Since cultural diversity and hence implied patterns are a vague dimension of the contemporary international security environment, mechanisms and rules which govern it can be investigated through methods and tools of social sciences and humanities. Such analysis of subjects and threats is a crucial stage of decision-making process in the field of security. Profound investigation should be undertaken first at the strategic level, before and during any military engagement. Yet, such activities are often neglected, which leads to the lack of proper strategic vision and perspective on the nature and development of threats of various provenance. Therefore it seems absolutely necessary to put the rich and promising academic achievements in the field of cultural analysis into action.

The research is based, among others, on fieldwork conducted by the Author in international strategic-level military and security institutions (such diverse as the Turkish Police Academy and US CENTCOM) in the years 2009-2013. The proposed analytical model consists of three components: sources of strategic culture, external factors and situational context.

The model comprises applications of chosen social sciences and humanities theories for the analysis of phenomena, activities, threats and potential scenarios of development of a specified political situation that should be included in the strategic-level intelligence collection and decision-making

process. The tools and methods applied in the model include, among others, selected methods of cultural anthropology, Social Movement Theory, Merton's Adaptation Modes, Cultural Trauma Theory, theories of Hofstede and Schwartz, Mathematics of War, and powermetrics.

The presentation concludes with a reflection on ethical dimensions of applying social science research into security sector research and activities. It is indispensable nowadays when the need to integrate the worlds of academia and security sector is imperative.

China's Nascent Underwater Nuclear Deterrent – The Sea Leg of China's Nuclear Triad Takes Form

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This paper examines the development and deployment of China's nuclear-powered ballistic-missile submarines (SSBN), where and how China will operate its embryonic fleet of SSBNs and assesses China's SSBN force structure in 2020 and beyond.

China's second-generation *Jin*-class SSBN is likely to conduct the People's Liberation Army Navy (PLAN) first nuclear deterrence patrol, a long-held Chinese ambition finally coming to fruition. The *Jin*-class will carry the improved JL-2 submarine launched ballistic missile (SLBM), expected to be operational by the end of 2014. A historical first, China is thus on the verge of establishing the country's first credible sea-based nuclear deterrent. A submarine-based nuclear second strike capability for China's nuclear force structure raises a number of questions which this paper seeks to address: What will China's SSBN force structure look like in 2020 and beyond? How and where will China deploy its SSBNs? Who is China's assured retaliation aimed at deterring, what will it mean for China's strategic ambitions and the balance of power in Asia? In order to do so, this paper analyses China's sea-based nuclear deterrence and SSBN force structure based on:

- The strategic geography of the East and South China Seas
- China's overall naval strategy of sea denial in those 'Near Seas'
- The PLAN's anti-access/area denial (A2AD) capability suite

This paper argues that China's strategic ambition is to become a dominant sea power in maritime East Asia. It also contends that China is pursuing a strategy

of sea denial in the East and South China Seas and the waters beyond that, extending into the Western Pacific Ocean. The paper maintains that A2AD capabilities and sea denial strategy are inextricably linked with China's undersea nuclear deterrence and pursuit of a second strike capability. Also, being capable of assured nuclear retaliation will propel China significantly closer to true great power status. Thus, a Chinese underwater nuclear deterrent will have a substantial impact on the structure of the international system and great power politics in the 21st century. However, several dilemmas confront Chinese decision makers when deciding on the future of the nation's SSBN force structure and deployment patterns. The inferior technology of China's SSBNs – high noise levels and resulting poor stealth– might compel China to keep its strategic submarines close to home to avoid detection and be under the protective cover the Chinese coastal navy and shore-based weaponry and aircraft. Conversely, the relatively short range of the JL-2 SLBMs severely limits the target set reachable from Chinese waters. Japan, as well as Russia and India are well within reach from Chinese coastal waters, but American territory (bar Hawaii and Alaska) is not, generating a rationale for deterrent patrols in the Pacific Ocean. Geography, submarine technology, the combined capabilities of the Chinese Navy and overall strategic ambitions will influence China's decisions on which SSBN fleet the PLAN will field in the decade to come.

Globalisation's Impact on Navies in the Asia-Pacific: From the Modern to the Postmodern to the "Quantummodern"

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Globalisation, comprising its various political, economic, socio-cultural and communicative facets, is ubiquitous in the world today. Nonetheless, the most salient characteristic of globalisation is its economic aspect, especially the global sea-based trading system. Globalisation has thus impacted upon the roles and missions of navies to a large extent—especially since navies reflect the states that they defend—directly shifting the focus from a military or war-fighting role, to one that is premised more on the constabulary or policing, and diplomatic roles of navies; and indirectly broadening these constabulary and diplomatic requirements with the rise of non-state actors. Such a shift is based upon the postmodern cooperation to defend the global sea-based trading system instead of the modernist conflictual system of gaining a military edge over the competition. With what Joseph Nye and David Welch called the “thickening” and “quickenings” of globalisation, the changes wrought by globalisation upon navies are similarly likely to increase, shifting Ken Booth’s “triangle of naval roles” into an isosceles one, with the constabulary and diplomatic roles being the equal sides. However, whilst such changes are more true for the European navies to a larger extent, these changes are more curtailed within the Asia-Pacific wherein modernist conceptions of Westphalian sovereignty and territoriality still hold tighter sway, with plenty of disputes between the various Asia-Pacific states, territorial and otherwise, in effect threatening global trade. Booth’s “triangle of naval roles” is therefore more equilateral in the modernist Asia-Pacific than compared to the more postmodern European navies. On the other hand, given its geographical location, the Asia-Pacific is of crucial importance to the global sea-based trading system; there is no other region of the world where maritime

cooperation is as important or as necessary. Consequently, considering the various arguments for and against globalisation and peace, this paper further posits that *constabulary and diplomatic competition*, rather than cooperation, might continue to reinforce an “uneasy peace” within the Asia-Pacific region. The role of navies in the Asia-Pacific has therein shifted from the modern to the postmodern, and subsequently to the superpositionality of the “quantummodern” (a marriage of quantum and modern): denoting the postmodern shift of navies to constabulary and diplomatic roles from the modernist war-fighting role; but yet at the same time, these constabulary and diplomatic roles concurrently exist along the lines of modernist competition rather than solely postmodern cooperation.

Baltic States and NATO: Back to Basics after a decade of membership?

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The accession of Estonia, Latvia and Lithuania was one of the most debated issues in the process of NATO's enlargement. Now after a decade of membership, the paper will assess the effects of Baltic states accession on NATO and on the states themselves. It will also evaluate the current status and future developments of the Alliance as viewed from the Baltic perspective and examine what NATO and the nations could and should do to strengthen Baltic security. The paper will consist of the following main parts:

First, it will briefly look back at the pre-accession period in order to recall why the Baltic states wished to join NATO, but also what were the concerns which were raised specifically in the context of NATO enlargement extending to Baltic states.

Second part will assess the effects membership both on NATO and the Baltic nations themselves. Among the questions considered will be: How have the three states performed as Alliance members? What have been similarities and differences between them? How and what have they contributed to NATO? How has NATO membership affected Baltic states security and defence policies and armed forces development choices? How has NATO contributed to Baltic security? How has Baltic membership in NATO affected their security and the overall strategic situation in the Baltic region?

Final part of the paper will contemplate the way ahead for NATO in the evolving security situation resulting from Russia's aggression against Ukraine. It will reflect on how the Baltic states see NATO's role and functions, what

expectations they have towards NATO and what could the Alliance and they themselves do in this situation to increase security and stability in the region.

The sources used in the research will include a variety of scholarly articles, think-tank analyses and policy papers, printed and internet media articles, official documents, speeches and statements from the officials in the region and beyond.

The Small A2AD in Asia Pacific: The Development and Future of Vietnam's Denial Strategy

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Vietnam's military modernisation presents an important concern to the security issues in the Asia Pacific. In the face of China's naval expansion, Vietnam, with its improving financial capacity as a result of its continuous economic growth, has invested in several large projects concerning its sea denial capabilities: the Russian Project 636 (Kilo Class) submarines and K-300P Bastion coastal defence systems with P-800 Yakhont anti-ship missiles being example of such investment. Furthermore, Hanoi has also undergone some organisational reforms to improve the status of its navy and air force. As a result, some observers use the term "anti-access and area denial (A2AD)" to describe Vietnam's current military strategy based on the nature of its military build-ups. However, Vietnam's A2AD differs in two ways from the original Chinese version, which is aimed at US military presence. Firstly, Vietnam's geographic location endows its armed force with access to attack the major bases of the People's Liberation Army Navy (PLAN) on Hainan Island. In other words, Hanoi has more tactical options, such as pre-emptive strike, than that of denying China's maritime presence. Secondly, the low density or non-military conflicts in the South China Sea / East Sea make Hanoi have to possess more than war-fighting capability. Despite Vietnam's considerable efforts on sea denial capability, China continues to create new territorial disputes using paramilitary and commercial means such as what was demonstrated in the recent oil drilling incident. Thus, Hanoi's A2AD strategy needs to be more comprehensive than that of China.

Considering the two special features of the Vietnamese A2AD strategy, this article will review its history since the unification in 1975. Next, this article is

going to analyse the present strategic influence of the Vietnamese A2AD strategy on the international community, particularly on the expanding PLAN. Finally, the potential future development of the Vietnamese A2AD strategy, including the paramilitary part, will be discussed. This article is applied for the working group of Security, Defence Policy and Strategy.

What to Expect of the Strategist: Can Strategy be Mastered

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What should be expected of strategists and their performance in the future? One legacy of the past decade will be rising doubts on the ability of the generic strategist to employ military force to derive desired political consequence. Such doubts are not new, recurring approximately every twenty years since the advent of academic strategic studies.

The most recent two recurrences have occurred in the post-Cold War period and emphasized the complexity of strategy and the difficulties of prediction in a necessarily future-oriented discipline, and even suggested that the master strategist is a myth. This is partly a reaction to the other side of strategic studies, which perceives the strategist as a hero who may holistically overview the myriad dimensions of strategy at once.

This tension, between exploring the multi-dimensional complexity of strategy and the practice of strategy within that context, lies at the heart of the renewed doubts toward the strategist. Strategic theory is comprehensive. Its purpose is to investigate every dimension, to educate and to provide a common language to aid in the actual practice of strategy. Strategy in practice is the opposite; it is reductionist. The practicing strategist must ignore that which is not relevant and perceive the core of the situation. Academic strategic studies have shifted their weight toward comprehensiveness, at the cost of practicality. The doubters witness poor strategy in practice and doubt; they look to theory to aid in repairing practice and continue to doubt.

History indicates that practicing strategy is difficult and that many fail—but also that many succeed. If some doubt strategists today, it could be that their expectations in the recent past were too elevated and too remote from the

realities of armed force. Expectations of the strategist must align with those realities, rather than with the desired political consequences.

Working Group 7: **Armed Forces and Society**

Working Group Chair Report

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The Presentations in Working Group 7, Armed Forces and Society, consisted of a broad variety of topics. During the last three days we have had ten presentations. The topics reached from different implications of Arab Spring on the regional society and the involved armed forces to questions of migration and its implications on society and armed forces. Another region, the topics dealt with was Afghanistan. One question was, how to win hearts and minds and why the armed forces failed. We also discussed future genetic profiling of soldiers and thought about, what a strategic soldiers had to be able to deal with. Security strategies and questions of migration and possible implications on future armed forces were presented.

There were full papers to be presented, and some others, which brought only first results of a larger research. But the main effort of such a conference from our point of view is the possibility to discuss papers and results of research on the one hand and on the other hand, the possibility to get in contact to other researchers and to network.

Separation and Integration Approaches to resolving civil-military tensions in Germany and Japan

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Japan and Germany both needed to start anew after World War II. Both were in the same alliance, both defeated, and both had to reconstruct their societies, resolving problems of civilian control over the military. Both countries rebuilt their Military Industrial Complex, but because of the after-war sentiments both were very reluctant to become militant forerunners in military security questions. For both countries war making was only the last resort for (self) defensive purposes – although in the case of Germany, the nation has seen the rise in the use of force in crisis management, for example in Police Training Missions. Both countries have strong pacifist movements that are critical of the use of military force.

Given this post-war history one of the most interesting aspects is that Germany and Japan chose totally different paths to solve the question of civilian control and civil-military relations. Whereas Germany chose to maximize the integration of the armed forces in society, from the philosophy of the ‘civilian in uniform’, the Japanese Self Defense Forces are not integrated in society, indicating civil-military relations that rests on ‘separation’ rather than ‘integration’.. Using Burk’s typology to characterize the two nations, one could state that German forces are growing to be more peripheral, even as Armed Forces remain central in its civil-military life, where German armed forces are used for purposes less than national survival. By contrast, Japan’s Self Defense Forces has been and remain largely estranged from the society, even as its initial *raison-d’être* of being the domestic police organization gave way to being the nation’s ultimate defence force, first from the Russian invasion (during the Cold War) and then from the Chinese expansion. For the

latter reason, Japan's armed forces profit from the existing civil-military relations in acquiring increasing military budget while the rest of the Western world reduces theirs. Even despite this, Japan's armed forces remain estranged largely from its mother society in terms of values. In short, while neither country the armed forces would be considered to play so central a role in their foreign policies, Japan and Germany chose different strategies for the management of civil-military relations -- German civil-military relations was founded on integration, and face the danger of becoming peripheral given the lack of existential survival threat from external and given the lack of genuine popular support ; Japan's armed forces have always profited from external threats in the Far Eastern geopolitical sphere, but remain largely estranged from its own pacifist-oriented society.

The Norwegian Soldier – A Warrior or A Strategic Corporal?

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Counterinsurgency operations, argued to mainly be fought and won at the tactical level, has the population as the center of gravity instead of a conventional enemy-driven kinetic approach. This implies a decentralization of power where soldiers' actions on the ground are an essential prerequisite to win the population and further to achieve the strategic aimed end-state. It also represents a shift in soldiers' roles on the ground, as soldiers now face operations that include humanitarian-, peacekeeping and psychological efforts, soft-effects, while also running the risk of full-combat operations on a battlefield that is situated amongst the people.

To master counterinsurgency operations, which has been called the graduate form of warfare, implies the existence of junior officer who understand this population-centric approach, and act accordingly, and reflects the role of soldiers which General Charles C. Krulak coined as the Strategic Corporal in 1999. This seems challenging on at least two accounts. On one hand these tasks seems to deviate from the traditional Warrior ethos, both perceived amongst soldiers by society at large. On the other hand, a conventional Warrior ethos seems to be enforced by the existence of a post-Cold War focus within Western military training and recruitment strategies. Having a Warrior ethos locked within the conventional domain might impede soldiers from conducting operations within the population-centric approach, thus inhibiting successful COIN, to win the populations hearts and minds.

This study seeks to understand how the Norwegian professional soldier experience and understand their part in Counterinsurgency operations. Through a qualitative study of Norwegian soldiers with experience on the tactical level from Afghanistan, this study seeks to map out which, if any, of

the skills put forth by General Charles C. Krulak notion of The Strategic Corporal, enhanced through interlinked requirements from the latest Norwegian Joint Operational Doctrine (FFOD 2007) and NATO's Allied Joint Publication on Counterinsurgency (AJP 3.4.4. 2011), can be identified within Norwegian professional soldiers. The study further seeks to understand if preconceptions about 'the Warrior' hampers or alters an efficient population-centric approach, and if this can be viewed as a hindrance enhanced through either or both a military or societal discourse, driving junior officers to prefer kinetic means in favor for more suitable soft-effects.

Could we have predicted the Arab Spring?

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Differently from the current literature that mainly focuses on the balance of political or economic factors that lead to revolutions, this paper attempts to explain the role of a combination of various factors that led to the Arab Spring uprisings, with specific attention paid to political, socio-economic and social media.

We explain how the political environment as objectively observed by factors such as the years in power of the authoritarian regime, democracy index, peace index, governance indicators and other factors may have had an influence on the occurrence and timing of the unrests. Furthermore, though the socioeconomic and economic factors such as unemployment, especially youth unemployment, inflation, and inequality had contributed to discontents before the uprisings, the revolution did not ultimately come about due to poverty and desperation of the people. Instead, the reasons for the uprisings seem to have centred upon an improving economy and the hope for better opportunities under potentially democratic governments. The relatively better economic environment had actually served to lower the cost of the protest. We discuss how technology, in particular the social media and cyber-activism, allowed people to coordinate their protest and therefore reduced the cost of the protests.

We also propose a simple theoretical model to show that government's investment to suppress revolts through controlling the media, brainwashing people and building military power will be unsuccessful unless it reverts to

extraordinary measures. The present paper aims to provide a first, in-depth look at how these aforementioned composite factors reinforced each other to lead to the Arab Spring.

“Winning hearts & minds – alternative or necessity?”

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The concept of so called “winning hearts & minds” (further: WHAM) approach to contemporary armed conflicts is not a new one. For the first time in modern times, such an approach had been stated and to some extent implemented during Malayan uprising against Commonwealth in 1950s and by US forces during Vietnam conflict. More recently, the same approach had been recalled by George W. Bush in the first days after invasion in Iraq and deployment of international forces in Afghanistan. The concept of WHAM adopts presumption, that in order to prevail over opposing forces, in particular a guerilla one, it’s absolutely necessary to gain a sympathy, understanding and cooperation of local population affected by armed conflict. The concept, even nowadays, is far away from being clarified and structured into military procedures. Nevertheless, it is becoming a common understanding, that without getting a local population on “our” side, chances for success in complex and hostile environment are becoming dramatically decreased. International organizations and majority of countries, decided to spend a tremendous amount of funds on infrastructure and social projects (i.e. Provincial Reconstruction Teams). New units had been created like PsyOps, CIMIC-s, Civil Affairs and empowered with several tasks and procedures of non-kinetic character aimed at gaining a cooperation of local population. The concept of WHAM had also been implemented into military documents i.e. US Army Counterinsurgency Field Manual (2006). Raising awareness of a need of WHAM implementation did not change a fact that the concept is still on a very early stage of development. Examples from Iraq and Afghanistan proves that still much remains to be done and the WHAM concept needs further improvements.

The paper will introduce to a brief history of winning hearts & minds concept followed by examples of armed conflicts when it had been introduced (i.e. Malayan Uprising, Vietnam war, Iraq and Afghanistan).

In a next part I will focus on implementation of WHAM into NATO military doctrines i.e. Comprehensive Operations Planning Directive from 2013, Allied Joint Doctrine for Civil-Military Cooperation AJP-3.4.9(A) from 2013 and Allied Joint Doctrine for Counterinsurgency AJP-3.4.4 from 2011. Next, I will introduce outcomes of scientific research projects concerning effectiveness and efficiency of non-kinetic activities in Afghanistan (i.e. Lyall, Blair, Imai, Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan – 2013) and finally I'll present my own conclusions for future development of NATO doctrines in correlation with winning hearts & minds concept.

NATO Response Forces in crisis management

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The essence of crisis management is manifesting a prepare for taking the control of them by way of planned activities, a response if the crisis situation will be appearance and a remove their negative effects and reconstructing stores and critical infrastructure. The responsible of the crisis management are the public administrations institutions which are a elements of the management system of the national security system. But if the source and measures being in their disposition will be insufficient the relevant institutions can report to Ministry of National Defence to support of military forces. The military forces have a specialist equipments and if we use of them in crisis situations the actions can be finished earlier.

The author in article want to show the significant of the military forces in effective crisis management in case a non-military threats will be appear. The theses brought up in it will be concern a specialist military forces which can be use in crisis management, the decision process of used a military forces in crisis management; foregoing tasks of the military forces in crisis management and the perspective of use them in the crisis management.

Toward genetic profiling of the military personnel? The Pentagon's role in the era of personal genomics

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Rapid advances in DNA sequencing and other genetic technologies offers new applications of genetics for the military personnel management. This is most advanced in the United States as the Department of Defense has played a vital role in funding various biotech research projects. In its 2010 report *The \$100 Genome: Implications for the DOD* JASON, the Pentagon's advise panel composed of the leading scientists, recommended that the DOD should take a "leading role in the personal genomics era and become full partners with industry and academia in creating useful information from genotype and phenotype data." JASON suggested – and its recommendations have almost always been taken seriously and implemented – that the DOD should not only collect and archive from all military personnel DNA samples but also collect a complete human genome sequence data which can enable to correlate genetic information (genotype) with the phenotypes that are of the greatest relevance to the military. In other words, the idea is to search for the genetic determinants of the qualities which make a perfect soldier of the future.

Genetic screening has already become popular in identifying the best candidates for athletes. Numerous of good "sport genes" have been discovered which allow for greater endurance and longer performance (e.g. a R577X variant of ACTN3 gene also known as the "gene of strength, ACE/I, MSTN or EPOR). The future application of genetic screening by the U.S. military will allow for identifying good "combat genes" (positive profiling) as well as bad genes (negative profiling). This, in turn, will greatly improve the recruitment procedures as well as allow for better assignment to particular services and formations, and allocation of specific roles and tasks. Social

scientists have already analysed the process of the “geneticisation of society”, i.e. the increasing role of genetics in defining and explaining various aspects of human traits and behaviours. What have recently become evident is also the Pentagon’s interest in seeing servicemen increasingly in biological and genetic terms. Thus, I would argue, we can already talk of the inevitable geneticisation of the U.S. military.

However, the geneticisation of the selection and screening methods of candidates for the military will face us with some grave social and ethical dilemmas. The most important is human element in war, as well as the issues of justice and free will. I shall discuss the moral puzzle with reference to a science fiction film by Andrew Niccol *Gattaca* (1997) as it shows a dystopian future in which social status and career are no longer the result of knowledge, skills or passion but are decided by genetic information. It tells the story of a highly discriminative society which separates people not because of what they are but because of what they might become (the DNA) – as we know that genes increase the probability of a specific traits and behaviours but do not fully determine them. Thus one must be very careful when it comes to the convergence of genetics and the military.

Civil-Military Relations in the Arab Spring

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The events that took place in Tunisia, Egypt, Libya, Yemen, Bahrain and Syria in 2011 highlight the critical role of the military establishment and security forces in situations of political transition such as authoritarian breakdowns and revolutionary ruptures. For three decades after the end of the colonial era, the military establishments of the Arab world were studied in detail. Following the ‘civilianization’ of governments in the 1970s, the study of civil-military relations in the Arab world faded. Indeed, ‘the man on horseback’ was no longer seen as a critical element in the make-up of regimes. Instead, there was an attempt to focus on how authoritarian regimes used the security services – intelligence, police and paramilitary organizations – to keep society down.

With the revolutions of 2011 – whether successful or unsuccessful – there has been a surge of interest in the study of Arab militaries. A revolutionary situation emerges in a country as a result of accumulated grievances on the part of the population and might tip into violent political contestation against the state. However, whether a revolution *succeeds or not* depends on the response of the state’s coercive apparatus. The response of the armed forces is itself dependent on its relationship with the existing regime, its socioeconomic status, its ethno-sectarian and regional make-up, and on its links with patron states which provide it with arms, training and which may or may not influence its ideas on civil-military relations. In this context, the armed forces could support the incumbent regime wholeheartedly, it could declare neutrality (which is tantamount to supporting the revolution), go over to the ‘people,’ or splinter into opposing groups, some supporting the regime and some supporting the revolutionaries.

This study will address the differing responses of each military establishment and the associated security forces during the Arab revolutions of 2011-2012. In Tunisia a small professional military that was distant politically from the incumbent regime take the side of the people against the regime and its associated paramilitary forces. In Egypt, a huge 'corporatist' military, one with extensive internal interests declared neutrality when it concluded that the incumbent regime threatened the viability of those interests. In Libya and Yemen, the military establishments were split along tribal and regional lines. The result in Libya was a stalemate that was actually tipping in favor of the incumbent until foreign intervention tipped the scales in favor of the revolutionaries. In Yemen the preponderance of military units, disgruntled tribes and aggrieved population ultimately tipped the scales against an incumbent that was politically and financially bankrupt and facing a host of other parallel problems. In Bahrain and Syria, the ethno-sectarian structure of the militaries are supportive of the incumbent regimes; however, what cannot be discounted is the external factor in shoring up support for the incumbent regimes. In Bahrain, support from the West and the Gulf Cooperation Council states have helped the incumbent regime enormously. In Syria, the help provided by Iran and Hezbollah – allies of the incumbent regime – has reversed the slow but steady erosion of the Syrian armed forces and reinforced its role as a pillar of the incumbent.

Such a study cannot be complete without addressing the issue of Arab countries in which no revolutions have occurred to date; some of these regimes face serious internal political and socioeconomic problems. Our analysis here is marred by several problems. First, it is difficult to categorize easily the remaining Arab countries: e.g. what are the differences and similarities between the three remaining North African states – Algeria, Mauritania, and Morocco – which have not witnessed revolutions? Algeria is the richest and has the most powerful army among those three, but Algeria probably has the most acute socioeconomic problems, ones that could lead to a renewed outbreak of violence? How does one categorize the monarchies? On the surface they all seem stable and have greater legitimacy than the authoritarian republics. But is this true for Jordan – always perpetually on the

threshold of crisis – as it is for Saudi Arabia? What about Lebanon, Sudan and Iraq, which seem to be ‘outliers’ for the moment?

Second, the fact that no revolutions have taken place in the remaining countries described above means that our data set about them is limited. Of course, data, in general about military establishments is often scarce or speculative. But in these cases where there have been no revolutions, we are forced into speculation and extrapolation more than in the cases in which revolutions have occurred.

Cross border Minority Issues in the Czech Republic, Poland and Slovakia – Challenges for Security in a Dynamic Environment

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The Central European region throughout the 20th century has demonstrated strong national and ethnic turbulences affecting the security and development of societies in different policy areas such as: economic, social and cultural policy. International diplomacy, national policies, and social trends impacted minority groups subjectivity, and their modes of functioning. Conflicts complexity arising on the basis of ethnicity and nationality in the Central European countries have been uncommonly persistent, and implementing various factors.

Systematization of ethnic and national minorities conflicts points out a very characteristic common feature of being transborder conflicts involving not only minority groups members, but local and national authorities of the Czech Republic, Poland and Slovakia. The rising worldwide concern in Human Rights over the last 30 years has attracted particular attention to the question of ethnic and national minorities in the mentioned states as part of the democratization and development processes.

Bilateral and multilateral relations between these countries confirm the tendency of progressive tackling, social disturbances, and potential conflicts. These non-military challenges to security and political stability shall find a response in national and international relations policy regarding the sensitiveness of the issue in the region. The core problem is to conciliate the supremacy of national interests with minority groups individual ones.

This paper discusses different approaches to the question of ethnic and national minorities in respectively in the Czech Republic, Poland and Slovakia, and possible scenarios of evolution in politics toward minority groups. The scope of factors and intensity of their impact is extremely diverse, and their combination pertains to the most composite problems in social policy today. As different approaches have been already implemented to manage the “minority struggle” in the Central European countries, today’s intercultural approach is the leading one to manage the society.

The central question is what are the challenges that countries will face concerning intercultural policy and how will they be able to respond to the needs of different stakeholders within growing migration processes especially around border areas.

Reintegration into labour market after early retirement from military and police: European Practices

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Drawing on policy variation across European countries this study analyses the differences, similarities and the best practices in officers and serviceman reintegration into labour market after their early retirement. The success of reintegration depends on national labour market policy towards employability and specific measures in employment assistance for officers and serviceman. The search for sustainable approach toward employability of retired officers and serviceman fostered to conduct institutional survey. The survey was conducted using set of connections of military attaché and the network of CEPOL. Additionally, information was collected from secondary sources about policy in five EU countries.

Analysing retirement practice of the police and the military in EU countries, it is noted that the police officers retirement is organized 5-10 earlier than full retirement; their pension is worth a substantial part of previous salary. For that reason, reintegration programs are not needed and in majority of countries do not exist. The situation in military is different. Military rejuvenation forces to cut middle-age people into early retirement. It means that they will have to reintegrate into the labour market in order to maintain a similar level of well-being for themselves and their families. Results reveals three different types of reintegration programmes for serviceman in EU member states.

The first group consists of the countries where there is a constant rejuvenation of the military and servicemen can retire more than a decade before the full retirement age. This group comprises the majority of our analysed countries: Ireland, Bulgaria, the Czech Republic, Estonia, Spain, Croatia, Latvia,

Lithuania, Poland, Romania, Slovakia, Slovenia, and Finland. The second group consists of countries where servicemen can retire 6-10 years earlier than other professionals. These are UK, the Netherlands and Germany. The third group consists of countries where the retirement age for the servicemen is close to the full retirement age (5 years or less before the latter). These are Austria, Belgium, Denmark, and Luxembourg.

In all our analysed countries servicemen may terminate their military service before the early retirement age. In some countries (Germany, the UK, France), persons can benefit from the reintegration programs for servicemen who enter early retirement. Pension received by servicemen is calculated using different methods and its size, compared to the previously received salary, is also substantially different. In some cases laws are being adopted to prevent retired servicemen from pension reduction due to a new state pension system (France) or when they are recruited in a public or private sector (Croatia).

Grouping countries by passive labour market policy regarding officers and servicemen, we cannot see any links to the prevailing social system models, so we can assume that this is rather related to the different development of police and military as a special institution in each country. At the same time there is a clear trend to provide bigger financial support (bigger pensions) in cases where early retirement age is close to full retirement age.

Austria's Security Strategy: Reflections on the Concept and Notion of Security

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This paper focuses on the notion and concept of security as outlined in Austria's new National Security Strategy. The fundamental aim of this contribution is to analyze important social and political implications in the term 'security' from a general socio-political perspective. In addition, the paper aims to examine key aspects of modern security concepts by studying Austria's contemporary security policy. It argues that Austria's new security strategy itself has become risky in so far as it stimulates an inflation of the term security, thus resulting in a loss of meaning and importance of traditional security concepts and military doctrines in today's public debate. As a consequence, the Austrian armed forces are constantly losing public acceptance and support in daily politics. The paper examines the respective theory-practice linkage of Austria's security policy and draws conclusions regarding future developments in civil-military relations.

Working Group 8: **Defence Management and Economics**

Working Group Chair Report

Robert Beeres

Netherlands Defence Academy

Markus Gauster

Austrian National Defence Academy

Ladies and gentlemen,

This was the sixth Annual Conference of the International Society of Military Sciences. We have been to Amsterdam, Stockholm, Tartu, Kingston, Copenhagen. And now we have been see a bit of Vienna. The Defence Management and Economics track has been a small, however versatile, working group from the start of the conference in 2009.

This year five papers were presented. The first paper, authored by Christopher Hochmuth, provided us with information on the developments in governmental outsourcing to private military and security contractors and the potential problems associated with this outsourcing using the concept of epistemic power. One of his recommendations is especially important against the background of the theme of this conference. He states regarding the application for armed forces 2020, "while PMSCs have become sources to fill shortages in personnel for states for military tasks, it is important to identify the epistemic power that PMSCs gain over a state's security perspective in certain roles and tasks that are being considered to be outsourced, especially when considering tasks such as intelligence gathering or clandestine services."

The second paper, authored by Ugurhan Berkok and delivered by Abdelkerim Ousman analysed the munitions programs of Australia, Canada and the United Kingdom. Mainly, the paper focused on the munitions program of Canada.

Third, Jani Liikola, who according to his curriculum vitae 'knows the commandments of the things', presented a very interesting paper on the organizational creativity of a military organization against the background of Border Guarding. Next year when we are in Helsinki I look forward to the progress he made.

The fourth paper, written and presented by Markus Maruszczak and Johannes Weber, provided a perspective on opportunities, limits and risks in introducing economics into defence management. The authors conclude that "economic models can be very promising tools for a better allocation of resources and the development of future strategies but they have their limits".

Finally the last paper in our working group, authored by Myriame Bollen, Marion Bogers and myself, from the perspective of moving towards a common European defence policy analysed the development of burden sharing of 26 EU members.

We were also able to join the other working groups. I found the Military Technology track very inspiring as the themes that were addressed were very similar to our own. Maybe we should join forces next year? Then, Defence Management and Economics (DME) and Military Technology (MiT) would go together under the name of DEMMiT. We will leave that for the next President to decide. For now I would like to thank the almost former President of the conference of this year for doing a great job. Thank you very much Walter!

Defense Management and Private Military and Security Contractors: Responsible Outsourcing of Military and Security Tasks to the Private Sector

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While the use of Private Military and Security Contractors is heavily scrutinized in the media, their presence in military operations has not only increased but has become vital to military operations abroad. However, when it comes to Defense Management, this increasing presence of PMSC in security operations creates a subtle but growing shift in the security paradigm from the public/state to the private sector, via “epistemic power” of PMSCs as coined by Anna Leander. “Epistemic power” refers to the influence that private military and security contractors have on the state’s perception of security and decision making power. Are states aware which services they outsource and how much epistemic power private actors are able to exert?

Private military and security contractors surged in the wake in the U.S. invasion of Afghanistan and Iraq; one of the most infamous of PMSC was Blackwater International. In his book, “Civilian Warrior: The Inside Story of Blackwater and the Unsung Heroes of the War on Terror,” Eric Prince writes at length about the government contracts that Blackwater was involved in, so much so, that the company couldn’t tell one government client, the U.S. State Department, what it was doing for another government client, the CIA. While Blackwater doesn’t exist anymore as the company that it formally was, other PMSCs share a similar company profile to Blackwater, which leads to questions as to how much responsibly is a state giving to PMSCs?

In addition to military operations, PMSCs have also been integrated in UN Peacekeeping missions. In 2011, Åse Gilje Østensen published SSR 3, which

reports her findings on the UN's use of Private Military Contractors. While at first the use were limited to "static security guarding, logistic support and demining and ordnance disposal," some companies have taken on roles for which there is a potentially growing need. Recently, the OSCE has employed the services of an Austrian aerospace company which specialized in the production of UAVs, for its Special Monitoring Mission in Ukraine. Although drones have a multitude of uses, these drones specialize in imagery gathering, however, how much epistemic power could a PMSC exert on a state through intelligence gathering, or "drone-sourcing" coined Keric D. Clanahan?

Private Military and Security Contractors have learned some lessons from Blackwater's rise and fall, and one thing that has received a lot of attention is the need for regulation of contractors. The most successful form of regulating the industry was outlined in "ANSI/ASIS PSC 1 – 2012" as a management standard for quality of private security companies operations. The standard obliged its signatory companies to forgo offensive operations and adhere to auditing and regulation. Going further, clients are put at ease with the introduction of certifying these signatory companies. Although PMSCs can exert influence on a state's perception of the security paradigm, does the state endanger itself to be limited to an approval stamp for the analysis and decisions made by private military and security contractors?

A comparative analysis of munitions procurement in three countries

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Munitions procurement is the sine qua non for the operational capability of any defence force. However, this may not mean that defence forces cannot accept some supply risk for cost savings. This tradeoff can take a variety of forms in different dimensions. These dimensions are domestic to offshore production, public to private ownership, spot-market to contractual acquisitions, competitive to monopolistic markets.

The study analyzes the munitions programs of Australia, Canada and the UK. These three countries are situated in different strategic environments and have differing international involvements, hence different risk perceptions. Their programs will be presented and analyzed on the basis of above dimensions.

Organizational creativity of a military organization – an opportunity or threat?

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To maintain the security will greatly affect the economy. European Union, and Finland as part of it, is struggling in the midst of the current economic crisis. The economic challenges affect military authorities and the ability to sustain credible defences. When monetary resources decrease, organisations needs to adjust accordingly. To maintain operational efficiency innovative solutions are needed. This can be facilitated by the use of creativity, complementary organizational structures, suitable management techniques. In military organisations, reseachers' have focused on creativity only as a part of the military leadership qualities. Within this field there has been no studies on organizational or process creativity.

The concept of creativity is difficult to define. In general, it can be considered as an ability to take new perspectives on something and build them into something original that is functional. It also involves skills to produce some practical result. Military organizations are bureaucratic and therefore react slowly to change, even if the threats that they face are complex and dynamic. This makes these organizations rigid averse to uncertainty. Organizations tend to be bureacratic, but do all core processses need to be constructed this way? Or is it possible to convert these bureacratic parts into more dynamic operations that make full use of creative methods and support decision making? Military organisations should identify these aspects and structure the organization within the military context.

It is recognized that strategic level analyses of public sector organizations highlight the notion that hierarchical structures needs clarity and predictability.

The organizations' formal power that is achieved through efficiency allows the bureaucratic organization a controlled and desired quick result. It is important to understand that the creativity and innovativeness are opportunities which the military organization should use to increase the efficiency of processes and performance improvements. We need to create new ideas, even innovations, and through these means develop the organizations further.

This study aims to better understand the possibilities for military organizations to be flexible; capable of regenerating themselves; to diversify and be more interactive. We can achieve the normal process efficiency for general military organizations' processes that are in the optimal state in which processes are safely executed. But what if creativity and uncertainty can be used to achieve exceptional efficiency, and thus organization can get closer to the ideal model of a learning organization? For example, traditionally during emergency situations decisions can be made effectively, but are not likely to be creative. One reason for this seems to be the amount of time that is available. The process can be rational and linear, but parts of it can be made to include creativity, dependent on the desired results. Undesirable uncertainty can be managed in part by using creative working methods and adjusting management. Organizations can be further developed through creativity.

Chances, Limits and Risks of Bringing Economics into Defence Management

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In the past 20 years the conditions for defense management shifted dramatically. On the one hand we are facing a wide range of “new” threats and challenges, ranging from terrorist organizations, failed states and pandemics to energy and cyber. On the other hand, the world of the 21st century is a very complex, fast-changing and interconnected place. Therefore it became increasingly difficult to guesstimate how events today shape future developments and to make informed decisions and operational planning for a strategy. These dynamics also pose great challenges to planners in the defense management sector and increase the need for input from other disciplines, like economics.

The presentation will focus on the chances but also the limits and risks of economics to enhance the current strategy development process and its application in defense management. On the one hand we argue that, especially as the importance of economic power increases, strategists need to take this sphere more into considerations and understand how economic developments and dynamics influence the strategic landscape. For example the fact, that from 2000 to 2010 the world saw the fastest change in the world’s economic centers of gravity that affect decision makers worldwide, is highly relevant for strategic planning. Therefore an economic-scenario approach is a possible augmentation to strategy processes as well as an important tool to determine future requirements and to make decisions. On the other hand it is important to incorporate the economic trends at home. Demographics, smaller budgets and

political caution should be no minor part in defense management planning. Economic models can assist the strategy process.

In this context, the balance of hard and soft power within the well-established 3D (Diplomacy, Defense, and Development) approach becomes even more important when the aforementioned challenges – which can all be linked horizontally by economic considerations. The combination of utilizing the cultural and political expertise as well as development understanding of the diplomatic and development entities, together with the security capabilities of the defense organizations can help mitigate past mistakes while also providing a “softer” approach. In this context the cost-benefit model, which is in no way new, but has been limited to budgeting thus far, can be used as analytical tool for strategic matters. With regard to the 3D approach for example, it can assist to re-align and define the roles within a whole of government approach and thereby lead to a more efficient case optimized use of scarce resources. Furthermore, the underlying economic concept can be a valuable contribution to define roles to the best possible actor – or rather the mix of resources in the field – within in the overall strategy. In this framework it must also not be forgotten that expectations are managed and thereby support the collaboration between civilian and defense organizations for more informed and effective planning coordination organizational economics as a catalyst for optimization can assist the respective organizations to become more compatible with each other.

The cost-benefit example, however, also poses the question of the limits and challenges of the transfer and use of models from economics. While in economics the value to measure cost and benefit is money, the question of value can be quite challenging in the area of defense management. Therefore, in our contribution we also want to discuss the limits and risks of the use of these models.

In a nutshell, our contribution wants to demonstrate, how economics-scenarios and -models can help professionals involved in strategic planning within the defense management complex and their interlocutors to better predict future

developments and consequential action by the various actors that best fit a (future) scenario while managing expectations and help to better use the tax money as well as dwindling resources.

Revisiting Kollia's Preliminary investigation into burden sharing aspects of an EU's Common Defence policy

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As the EU does not command communal armed forces, the military defense of its member states remains a sovereign responsibility safeguarded by NATO. Recently, it is argued the EU should command its own common armed forces.

Kollias (2008), from the perspective of moving towards a common European defence policy analyses the burden sharing and free-riding behavior of EU15 members. Inspired by previous research by Sandler and Forbes (1980), by means of various indexes, per member state, Kollias depicts the benefits and costs occurred by cooperation. Comparing the EU15's efforts over the year 2001, the author asks himself: "Suppose the EU15 would create a formal military alliance offering an umbrella of collective defence and security to its members (EDU) what member states would be over- or under-contributing regarding the provision of collective defence and security?"

Our paper aims to test the robustness of Kollias' analysis and to find out whether, nowadays, EU member states have actually moved towards each other in the provision of EU-wide defence and security and the distribution of costs.

To this effect, we expand the number of member states by using EDA data and we compare EU results to US results on the delivery of collective military strength. Secondly, we focus on the mean results for the period 2006-2011. Thirdly, we expand on Kollias' original cost indexation by adding data on deployability, sustainability and deployment.

We have found that despite the increased number of EU member states, the increased period of time and the use of more sophisticated measures to calculate costs, today as before, Kollias' main conclusion remains standing: "France, Greece, Italy and the UK would be overpaying towards the costs of producing the collective EDU military strength if a common European defence came into existence (...). All other countries would be underpaying".

Also, when comparing EU member states to the US, both the discrepancy in defence expenditures as well as deployments remain immense.

Working Group 9:

Military Education

Working Group Chair Report

David Last

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To begin, we would like to add our thanks to the organizers for an excellent conference, and look forward to participating in Helsinki next year. Greetings from Paul Mitchell.

The working group on military education was added to the original 8 working groups in 2011. Papers are of interest to all of us in the military education business, and they typically span the whole range from tactics to strategic implications. This year, Finland, Sweden, Denmark, and Canada were well represented in the discussions.

Presentations reflected research at the tactical level (in classrooms and at the level of teaching and learning), the operational level (allocating resources and improving and evaluating effectiveness) and the strategic level (deciding what is to be done, why, and what should be achieved).

At the tactical level, we have studies from Sweden on the use of laptops in the classroom (Rikke Haugegard), and from Finland on student expectations of research-based learning (Hannu Rentola).

At the operational level, Paul Mitchell is working on designing courses to teach strategic design to senior leaders, and Juha-Matti Lehtonen of Finland is working on quantitative studies of student evaluations to enhance life-long learning. Christian Kammer's ambitious work on civic education in the

Austrian army both designed and implemented a program that will interest many other countries.

At the strategic level, two papers considered the wider context and implications of military education. Randall Wakelam is researching militaries as learning organizations, and David Last discerns the beginning of an epistemic community amongst those who teach security leaders.

The presentations are already posted on the collaborative research site for the Global Security Education Project, www.othree.ca/globalsecurity, and you can log in to leave comments or continue the discussion. Please contact me (last-d@rmc.ca) if you would like a password to the site.

I look forward to seeing you all again in Helsinki in October 2015, but in the meantime, I hope to see you online. For other working groups – there is lots of space, and feel free to start your own discussion forums.

Learning for War: Militaries as Learning Organizations

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The phenomenon of war and the academy have a long association, if sometimes an awkward or even conflicted one. Like the hackneyed phrase ‘military intelligence’, ‘military education’ is seen by many to be something of an oxymoron. For many academics the notion of military anti-intellectualism was seen as a given.

Ironically, as Correlli Barnett has observed, there is an implicit link between the military and many other facets of society. In his 1967 article, written near the height of the Vietnam conflict, he writes that: “... many of our civilian institutions, ways of thinking, techniques of organization and control, were evolved first in armies or during wars.” He continues: “The education of military elites is not therefore a matter of a specialized professional group, isolated from the mainstream of modern life. It is a subject of great interest and relevance.”⁹

Despite criticisms and misperceptions, militaries, and perhaps more so Western militaries, invest significantly in learning programmes. Oriented towards training in the early stages of a career in uniform, there are also high quality education experiences, particularly for officers, which rival those of any other profession. Taken together these learning continuums have been characterized as learning organizations by Peter Senge, the pedagogue who first introduced the concept in the 1990s.¹⁰

⁹ Correlli Barnett, “The Education of Military Elites.” *Journal of Contemporary History*, 2, no. 3 (1967): 15.

¹⁰ P.M. Senge, *The Fifth Discipline : The Art and Practice of the Learning Organization*, Rev. and updated ed. (London: Random House Business Books 2006): 313-5.

The proposed paper falls within a broader research initiative which seeks not simply to chronicle what schools, colleges and programmes have operated from time to time but to investigate and attempt to understand what various nations and their militaries have seen as the need for and benefit of learning institutions and programmes. This being the case, my approach will not follow the typical 'way of war' but rather consist of a pedagogical examination of a 'way of learning' and thinking. I hope to be able to achieve some level of meta-cognition or even meta-meta-cognition. How do the services think about learning? Do they as institutions understand or espouse the notion of the 'learning organization'? And what if they do, or do not? Is the concept of the learning organization something new or has it been present in all but name for centuries?

My hypothesis at this point, and the theme of the proposed paper, is that viewed broadly, militaries can be seen as learning organizations with members of the services being life long learners, at least within the boundaries of their profession.

Civic Education within Armed Forces

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New technical developments are used more and more within armed forces. Autonomous systems, Robotics and Cyber-Defence, for example, ask for additional skills for soldiers, which have to be covered as part of future military training. Military training will therefore become more complex, leading to the necessity to invest more time and money in it. At the same time, the trend toward reduction of defence budgets can be observed in Europe. This gap between the need of more training and the lack of the resources required can be detected especially in smaller European armed forces. Additionally the armed forces face the challenge to retain highly trained soldiers in the military. These developments have also an impact on military education especially Civic Education.

The current research project, ‘Civic Education within the Austrian Armed Forces’ tries to answer the question “Why does a democratic state in the middle of Europe need armed forces for its defence?”. In this context, the didactic guiding question for military education is “who teaches what, to whom, how and when”. That means, who are the teachers, which topics are delivered, who are the addressees, what are the teaching methods and when is the best time for Civic Education during the military service. The answers to these questions finally aim to elaborate a solution for the meta-question “Why do soldiers serve and fight?”.

In a first step a competence-oriented basic-concept was developed from a learning theory perspective via systematically structured knowledge modules to explain the interaction process between “Military and Society”. To teach this

interaction process in an adequate way, the recourse to prior knowledge of the conscripts is elementary.

A second step was the comparison of military courses with the European Qualifications Framework to figure out how these courses fit to different (military) educational levels. The finding was that all military and civilian courses provided by the Austrian Armed Forces, fit in five different levels.

The third step of the project was the transfer of the competence-oriented basic-concept into teaching topics. On this basis, level-based learning objectives were developed for all five levels. The last step was the elaboration of eight standardized teaching presentations together with explanatory booklets as a supplementary aid for preparing lessons for the first level. Teaching personnel for these standardized presentations are officers and experienced NCOs as so-called 'Political-Teachers'. The addressees for these presentations are conscripts. The standardization of the teaching material for the first level was necessary to create the basis for Civic Education because it is an interdisciplinary issue in the other levels. Meanwhile the research findings were implemented as an integral part in the Austrian military educational system.

Laptops in Social Science Lectures – Pedagogical Challenges and Benefits

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This presentation gives inspirations to teachers in higher military education who want to develop the students' use of laptops in lectures. In my job as a lecturer at the Danish Defence Language Institute I conducted a pilot project in autumn 2013 – winter 2014, aimed at developing the students' use of laptops during lectures to support their learning. Based on anonymous evaluations, several students had pointed to the fact that fellow students were using access to laptops during lectures to read updates on social media and writing homework instead of paying attention to the lectures. The comments in the evaluation reflected a tendency I had observed as well. The use of modern technology in the classroom is an important support tool for learning, and as much as we embrace it, we might gain advantages by reflecting upon strengths and weaknesses e.g. by the use of personal laptops.

I decided to conduct a pilot test in my lectures. The test period was 4 months with 6 lectures each week. 22 students in total were participating in the test. The questions I wanted to reflect upon were the following:

‘In which way does the use of laptops in the classroom challenge the teacher’s role as a facilitator of learning processes?’ and ‘what type of reactions from the students will we observe in the classroom, when the teacher to a wider extent will plan and control the use of laptops?’

Despite initial resistance and doubt among the students, results from the test period shows that when the teacher starts to use a method of selective and prioritized use of laptops - some sequences in the classroom will be assisted by

the use of laptops, other sequences without – the students experienced a higher level of concentration in the classroom. In addition, the students stated that plenary debates became more interesting and the effect of closing the laptop in sequences of the lecture generated a more focused attention on the topic of the lecture.

Another argument for a more critical glance at the use of laptops in military education points to the preparation for international missions. Military linguists will work in war zones, where the average citizen has a limited experience with the complex technology we have access to in the military training environment. Military linguists, and soldiers in general, need to prepare for interaction without overload of electronic equipment in order to match the local oral traditions of negotiation and dialogue.

In this paper, I will present the results of the test in details, and give examples of how management of the use of laptops in different sequences in lectures was conducted.

Students' experiences of research-based learning

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Warrant officer students working for the Finnish Air Force took part in the present research on research-based learning in the framework of a pedagogical leadership course at the Air Force Academy in 2013. Research-based learning was the main pedagogical principle chosen for the course.

The course was implemented using blended learning. The main focus was on the students sharing their experiences, their collective dialogue and cooperation towards a shared pre-understanding (Mezirov 1991: Adult Learning). The course comprised one online discussion, studying the background theory, collaborative writing on an e-learning platform, two days of contact teaching, construction of a collective mind map, and a report by each student. The students studied their own work environment and as a result, produced 15 reports on pedagogical leadership.

At the end of the course, 14 students answered a questionnaire. 85,7 % of the respondents were aged 40-49, and 14,3% of them were 30-39 years of age. There were 13 men and one woman. The students considered of great importance :1) the fact that their course reports were to involve their working life experiences (92,3 %) , 2) the contact teaching group discussion (76,9 %), 3) the distance learning online discussion (69,2 %) and 4) the contact teaching presentations (61,5 %).

The research is based on the application of the Grounded Theory method (Holton 2004) which places focus on the importance of grasping the essence of the material studied. The researcher analyses the answers using a coding method. One of the open-ended questions invited the students to assess how

well the principles of research-based learning were realised throughout the course. These five concepts came up in their answers: conducting research, knowing, dialogue, verbalisation and performing. Based on this, one could conclude that research-based learning made it possible for one to "share one's working life experience with others in a way that they could understand it". The students considered it important to study working life and to be able to share their experiences.

A teacher is a facilitator of learning. Kansanen (2008, 167) points out that a teacher is not only a researcher but also a practitioner researcher. Mäkinen (2006, 206) concludes that a teacher is someone who "has put all his resources to the full use while participating in the knowledge creating activities". A teacher guides the students' learning process and exploration showing a genuine interest in their findings.

Learning is always connected to a real situation, and emphasis should be put on the student's own role as an active learner. (Lindblom-Ylänne & Nevgi 2004, 83). The student's prior knowledge, skills and experience should be built upon. Students process new information by reflecting on and analysing it. At best, the research process inherent in research-based learning generates new understanding and knowledge. (Lindblom-Ylänne & Nevgi 2004, 64). The goal of instruction is to link together thematic entities through the dialogue of theory and practice. Biggs (1996, 361-362) describes this entity as a tight knit integration of syllabus, teaching methods and evaluation.

Feedback Evaluation as a Part of Lifelong Education Strategy in FNDU

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The Finnish National Defence University (FNDU) provides courses in academic and military disciplines. The undergraduate curriculum is compliant with the Bologna declaration. For professional and lifelong learning postgraduate department offers one year long senior staff officer's programme and thereafter equally long General staff officer's degree programme. The interest in this study is on the postgraduate programmes. FNDU's general post graduate curriculum is modeled as adult learner's pedagogy and university pedagogy. Learning aims for senior officers' skills and include areas like understanding technology in military field, management of practical exercises within the work environment, tactical planning and leadership and individual sustainable learning skills on the professional field.

Feedback produces information for evaluating the curriculum and its implementation. The questionnaire is drawn up not from a theoretical perspective but from the feedback interests from different groups involved. Longitudinal design may give information on how well opinions are sustained. This material is gathered from the students and their supervisors two years after the course ends. In the delayed questionnaire the main issues are how successfully the courses respond to students needs and needs of the employer. Previously limited amount of lightly processed data has been used to adjust curriculum or practice e.g. lecturing parameters in all course levels in the FNDU. In this paper, multiple data sources are examined side by side, the statistical tools (e.g. SPSS) are utilized from inductive analysis perspective.

There were 77 Likert-scale questions on own assessment of learning, own effort, teaching quality, arrangement of the courses, and support functions. In addition, there were free-text fields. There were 99 responses of 108 to the academic year 2011/12 senior staff officer course program feedback questionnaire. The delayed questionnaires included 60 questions divided to eight different sections. There were both Likert-scale as well as free text questions. Both supervisor and student questionnaires had the same items. However, there were problems locating the respondents and their foremen so that there were only 25 responses to the foremen's questionnaire and 40 to the students.

An explorative factor analysis of annual feedback questionnaire broadly identified three or four substantially different factors. By far the largest was the overall satisfaction factor that had positive loading on every question, and had highest correlation on the item "your overall grade to course" ($r = 0,79$). The second factor was research methods teaching and thesis support, the third own effort in studies.

The table below shows 2-way ANOVA results. The respondents explain almost as much of the variance as the questions, so there are clear differences between the respondents, too. The overall grade of the course will be used test if it is connected to the overall assessment factor.

<i>Source of variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F-critical</i>
Respondent	1316	98	13,43	22,2	0	1,2
Question	1503	73	20,59	34,1	0	1,3
Error	4324	7154	0,60			
Total	7143	7325				

We have not yet obtained the overall grade and in generally, are in the process of doing the analyses. The 500-word limit does not allow a more extensive presentation of tentative results.

From Irritants to pearls: how the challenges of military education are leading to an epistemic community of security professionals... at least amongst small states

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In the course of researching the content of professional security education at entry, mid-career and senior officer levels for military, paramilitary, and police forces in 194 countries, we have found that professors and administrators at many academies and staff colleges have consistent complaints and concerns. Some of these are common to the wider university community: concerns about academic reputation, credentials, quality assurance, publications, pedagogy, and technology. Others are specific to the problems of teaching security professionals: debates about the balance of socialization, education, and training, the role of language, the problem of official secrets, questions of loyalty, the conflict between academic and professional demands, and the roles of centers or institutes as vehicles to generate new knowledge. Arising across cultures, languages, and institutions amongst majority countries, these concerns define a community of practice charged with security education. Two possibilities are presented. The internationalization of security knowledge outside the control of major powers might be fostering the development of professional epistemic communities (particularly relating to peace operations, disaster management, and stabilization operations). Epistemic communities were crucial in containing and managing the Cold War, and may be vital for managing future security challenges beyond the capacity of any single state. Alternatively, institutional pressures may push larger states towards greater insularity and competitiveness, with efforts to control and lead consortiums supporting their interests. In this paper, we present data on security education irritants, complaints, and concerns, (k-anonymity protects those who provided institutional details) and relate those concerns to theories of

professionalization, institutional change, and the sociology of knowledge. Large states (powers) are more likely than small ones to teach competitive approaches to security, which precludes sharing of security knowledge, but might still join epistemic communities related to peace support, stabilization, and humanitarian assistance. These are "wedge" issues that can support collaborative security professionalization. Although large states have more resources devoted to security education, they contribute proportionally less to internationalization of security professions. Smaller states are more likely to host open and university-like educational institutions, which seek out international partnerships, driven by circumstances. It is amongst this group of small states that there is the greatest potential for research on evidence-based solutions to emerging security challenges.

List of Abbreviations

AI	Artificial Intelligence
AR	Army Reserve
AUT	Austria
CAF	Canadian Armed Forces
CANCAP	Canadian Forces Contractor Augmentation Program
CEPOL	European Police College
CIA	Central Intelligence Agency
CIMIC	Civilian Manpower Integrated Costing System
COBIT	Control Objectives for Information and Related Technology
COIN	Counter Insurgency
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPM	Communist Party of Malaya's
DARPA	Defense Advanced Research Projects Agency
DME	Defence Management and Economics
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War
EU	European Union
FMS	Flight Management System
FNDU	Finnish National Defence University
GSR	Strategic Globalised Risk
ICSR	The International Center for The Study of Radicalisation
IDPs	Internally Displaced People
ISAF	International Security Assistance Force

ISMS	International Society of Military Sciences
MANPADS	Man Portable Air Defense System
MFOs	Multi-Functional Operations
MiT	Military Technology
MoD	Ministry of Defence
MoE	Measure of Effectiveness
MoP	Measure of Performance
Nato	North Atlantic Treaty Organization
NCO	Non Commissioned Officer
NCW	Network-Centric Warfare
NGO	Non Governmental Organization
OSCE	Organization for Security and Cooperation in Europe
PhD	Doctor Of Philosophy
PLAN	People's Liberation Army Navy
PMSCs	Private Military and Security Contractors
PSYOPS	Psychological Operations
PTSD	Post Traumatic Stress Disorder
ROE	Rules of Engagement
SAC	Situation Awareness Centers
SDCS	Semi-Direct Control System
SIPRI	Stockholm International Peace Research Institute
SLBM	Submarine Launched Ballistic Missile
SoSA	System of Systems Analysis
SoSE	System of Systems Engineering
STARC	Specificity, Timeliness, Accuracy, Relevance and Clarity
TF	Territorial Force
UAS	Unmanned Aerial Systems
UAVs	Unmanned Aerial Vehicles
UCA	Unmanned Cargo Aircraft
UCDP	The Uppsala Conflict Data Program

UFAS	Unmanned Fighter Aerial Systems
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
US CENTCOM	United States Central Command
VR	Virtual Reality
VTOL	Vertical Take Off and Landing

Zum Zweck der Förderung und der Festigung von Militärwissenschaft in Österreich präsentiert die Landesverteidigungsakademie das militärwissenschaftliche Journal. Dieses soll die Fachrichtungen der Militärwissenschaft grundlagenwissenschaftlich beleuchten. Dabei werden die Begründungsdimensionen militärischen Handelns, das Phänomen des Krieges und dessen Ursachen mit dem vorrangigen Ziel der Kriegsverhinderung, der Erforschung sicherheitspolitischer und strategischer Konzepte, Theorien der Friedenssicherung und des Konfliktmanagements wie auch klassische Kriegstheorien behandelt.

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