

# Capability Formation Architecture for Provincial Reconstruction in Afghanistan

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## **Abstract**

A Swedish national audit in 2011 reported serious shortcomings with regard to Sweden's contributions to international efforts, not least the participation in the UN-mandated NATO presence in Afghanistan, where Sweden was in charge of one of the 25 PRTs (Provincial Reconstruction Teams). A review of this engagement makes it undoubtedly clear that there are interoperability problems between and within the various communities of interests at play. These problems boil down to Sweden's century-old, self-imposed subsidiary doctrine that the Government only will tell the state agencies what to do, not how to do it, and that ministers as a result are using a hands-off approaches towards agencies. There is no comprehensive architecture for Sweden's declared comprehensive approach of the PRT engagement. A list of remedial action lines is presented. Recommended keywords for the future are High level architecture and Systems thinking, areas in which the experiences from the Swedish Armed Forces should be reused.

## **Keywords**

Civil-military interoperability- systems thinking, change management, Sweden, Afghanistan, NATO

## **Preamble**

In 2004, The Swedish National Audit Office (2004) found that there were serious shortcomings in the Government's management of the state agencies' use of information and communication technology – *eGov* – a fact which was hurting citizens and industry, as well as the agencies themselves. This was not news to present authors, who for a number of years before and after 2004 had been engaged in the promotion of a modern approach to the Swedish eGov struggle (Charas et al, 2007; Lind et al, 2009; Östberg, 2010).

Then, in 2011, The Swedish National Audit Office (2011) again found that there were serious shortcomings in the Government's capacity management, this time with regard to Swedish contributions to international efforts. And so, in the light of eGov experiences, the present paper sets out to follow up on one such international effort: Sweden's participation in the Provincial Reconstruction Teams – *PRTs* – in Afghanistan.

In both cases, the focal point is that the Government of Sweden is using is an extreme version of management via state agencies. The group of central offices is itself an agency, and every single contact between the government and citizens, industry, and society at large, take place at the perimeters of the 500+ independent agencies ('islands'); some very big and some very small. Unless the agencies are specifically instructed to team up with other agencies – and are provided with a team-up-budget – cross-agency projects and services are few and far apart. Swedish participation in international efforts is an area where cross-agency involvement is a necessity, but, as pointed out by the aforementioned 2011 audit, has yet to be implemented. Figure 1 is graphical interpretation of the state-of-the-art regarding Sweden's participation in Afghanistan.



Figure 1: There is no hub proper for the spokes at the Swedish Central Government Offices, no 'PRT Office of Comprehensive Approach'.

## The UN-mandated NATO presence in Afghanistan

Osama bin Laden and the al-Qaeda network were believed responsible for the September 11, 2001 massive terror attacks in the United States. Following the Taliban's repeated refusal to expel bin Laden and his group and end its support for international terrorism, the United States and its partners launched an invasion of Afghanistan on October 7, 2001 (Operation Enduring Freedom, OEF). This invasion was a 'modernized' version of the invasion in

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Iraq, where CIMIC, the Civil-Military Cooperation concept, was used to emphasize the capability to achieve Tactical Consent from individuals and groups in the areas of importance. Today's popular notion of Winning Hearts and Minds implies a level of ideological communication with and control of the population, and thus goes far beyond CIMIC. Winning hearts and minds is however a phrase that has become associated with today's international civil-military presence in Afghanistan. Parallel to the OEF, the International Security Assistance Force in Afghanistan (ISAF) under NATO command also has a regular military involvement in Afghanistan. ISAF is based on a UN peace-enforcement mandate and, as of 6 January 2012, engages 50 nations and 130,386 personnel. To this should be added the increasing national NGO contingent, i.e., along with the phasing out of the national troops (including some 700 from Sweden).

In form of the November 2010 Kabul Declaration, ISAF and the Government of the Islamic Republic of Afghanistan entered a new phase of joint effort, and set up the conditions for irreversible transition to full Afghan security responsibility and leadership in all provinces by the end of 2014. It was furthermore recognized that ISAF's mission is part of a wider international community effort, the success of which cannot be achieved by military means alone, and is intended to be consistent with a broader comprehensive approach involving both civilian and military actors under UN leadership. The New Face Transition (from enforced peace to mentorship for sustained peace) will be conditions-based, not calendar-driven, and will not equate to withdrawal of ISAF-troops. The international civilian effort, including the work done in nationally-led Provincial Reconstruction Teams (PRTs), should also continue to evolve and enable greater Afghan capacity and leadership and prepare for longer-term development assistance. As from the 2014 final withdrawal, the PRT division will however be discontinued.

It is a gigantic undertaking to bring about coherence in such a massed plethora of different types of capabilities and actors, especially when taking the security situation into consideration. One can even question if it is actually possible to establish inter- and intra-operability dealing with so many hearts, minds and structures; nations, politics, agendas, industry, military, the UN, the International Committee of the Red Cross (ICRC), etc. To this should be added that most of the ISAF member states supplement their respective peace-keeping agenda with rebuilding and development aid, and with democracy and human rights programs

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from Government and civil society. Not to mention that Afghanistan is a kaleidoscope of geography, religion, clans, insurgents, criminal networks, politics, and fights for power – a picture that is not facilitated by the lack of a capable centralized government in the war torn and poverty stricken nation.

Multidimensional interoperability comes to mind and so does Kurt Lewin's (1951) aphorism that "nothing is as practical as a good theory". A far-reaching conceptualization may on the other hand be met by approval, yet will prove to be overly difficult to implement.

## **Interoperability in Civil-Military Operations**

The aforementioned difference between Winning Hearts and Minds (non-military efforts) and Tactical Consent (military efforts) indicates that there are interoperability issues in joint missions that need to be addressed.

In layman terminology, interoperability is a property referring to the ability of diverse systems and organizations to work together (inter-operate). The term is often used in a technical systems engineering sense, or alternatively in a broader sense, taking into account personal social, political, and organizational factors that impact system-to-system performance. If the system in question is the family of more or less independent government agencies, interoperability in the final analysis is the sine qua non for comprehensive Governmental capability. It requires Government leaders to take responsibility for improving the capabilities of Government agencies to effectively partner with other agencies and Governments as well as the private sector, non-profit groups, and research institutions. Governance is a foundational enabler for creating and improving Government interoperability/capability. That same governance was the focal point in the 2011 critique by the Swedish National Audit Office.

Addressing these foundational needs, and acknowledging that citizens and businesses expect efficient public services across Europe, the European Commission (2010) has initiated the 2010-2015 program on the Interoperability Solutions for European Public Administrations (ISA). The program addresses this need by facilitating efficient and effective cross-border electronic collaboration between European public administrations. ISA has a budget of 164.1 Million Euros. In the ISA context, interoperability

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means facilitated cross-border and cross-sector information exchange, taking into account legal, organizational, semantic (tactical), and syntactical (technical) aspects. It should be observed that ISA addresses service output (efficiency) rather than service uptake (effectiveness).

A similar dichotomy can be observed in military arenas, and in particular with regard to the use of computer technology. Operational headquarters needs to have in place a robust and efficient C3 agenda; Command, Control & Communications. By way of example, as a member of the NATO Partnership for Peace framework, Sweden invited NATO to participate in the development of such a "framework" to allow better interoperability between NATO and Sweden in civil-military settings. The ensuing joint project team consisted of the Swedish Armed Forces, the Swedish Defense Material Administration, the Swedish Emergency Agency, the NATO C3 Agency, and the city of Gothenburg. The overall objective for this Swedish agency initiated project was to test if a "service oriented architecture" (SOA) in the form of many-to-one information sharing could facilitate the linking together of sensors, decision makers, and weapon systems, as well as multinational military, governmental, and non-Governmental agencies in a seamless, collaborative, planning, assessment and execution environment. Among the lessons learned, worthy of mention is that the military community must learn to speak "civilian" and that military resources can, from a civilian perspective, look enormous and can hamper collaboration on equal terms. Over all, the reported results were highly appreciative of the SOA approach:

*"As the project progressed the use of SOA turned out to be facilitator for the experiment's success. It is hard to conceive how the project could have been able to integrate such a variety of Swedish military and civilian systems together with NATO systems and actually, in such a short time span, get them to interact with each other, have we not chosen a SOA-environment. Even though the emphasis in this project was to demonstrate the technical benefits of a SOA-approach, essential operational questions of how to operate in a SOA-environment have been identified."  
(Arnell 2009)*

An ongoing reality test of civil-military interoperability & capability is taking place in Afghanistan in the form of ISAF, and its semi autonomous Provincial Reconstruction Teams (PRTs). They started as military installations with just thin guidance on the

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use and reuse of civilian resources. Since then, the PRTs have developed more towards civil-military cooperation on a more equal basis. Initially ISAF was charged to oversee the country's progression into democracy in just the Kabul capital and province, but it has steadily increased its mandate, through United Nations Security Council Resolutions, to cover the entire country. The ISAF lessons-learning process has placed the integration of participating nations' products high on the agenda, recognizing that "embeddedness" is not enough:

*"The bulk of the criticism is directed to the military's tendency to forget the realities outside its own camp. With only loose external and internal guidelines, the PRTs are 'left to their own devices' to organize their mission." (Eronen 2008)*

This should not come as a surprise; the PRTs were given a free rein to conduct themselves as they saw fit in their own provinces. The PRT Terms of Reference actually recognizes that PRT commanders, whilst following the general intent and spirit of these Terms of Reference, will be bound to follow operational priorities set by their respective military chains of command. This may require them to assign 'functions not listed', or carry out functions listed in a less prescriptive manner.

One example of 'functions not listed' is how to deal with the oftentimes stark culture of corruption. Local Afghanistan politicians are seen to want to get rid of the PRTs, so there can be more unfettered opportunities for corruption or stealing the aid money that comes with foreign peacekeepers (Strategy Page, 2011).

However complex the PRT system may be, the Afghanistan ISAF member states have to live with it for several years to come. According to the ISAF PRT Handbook, PRTs are interim structures to be dismantled when they have fulfilled their missions: to build up the capacity of a district or province, then leave or hand off to the Afghans when the Afghans are capable of managing for themselves. Easier and quicker said than done. The present paper therefore looks into the possibility of getting closer to a good theory in support of the practical work the PRTs have been tasked to carry out. The practical work will not be less complex after the PRT system has been discontinued in connection with the 2014 military withdrawal. Tomorrow's practical work can however be improved by attending to today's concerns.

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That seems also to be the view of Godsave (2007). Based on the debate of how the PRT model is fairing in Afghanistan, she addressed the genuine concerns and issues which are rectifiable and suggested that the model might be more effective with clearer guidelines, an infrastructure project focus and advanced civilian training. With these improvements addressed, the model could be of future use in other post-conflict situations.

Reviewing the PRT concept, Abbaszade et al. (2008) concluded that the ISAF partners should continue to use PRTs and fund their activities. Some of the listed recommendations for improvements are that (1) a 'whole of Government' approach should be strengthened by means of dedicated appropriations, (2) the PRTs should eventually be civilian-led, yet fully supported by the military, and (3) deployments should be synchronized across agencies.

### **Re-Visiting the Concept 'Civil-Military'**

By using the term 'Comprehensive Approach', EU has stressed the civil part of the PRTs. Norheim-Martinsen (2009) concluded that such a Eurocentric approach broadened the perspective to the extent that broad (civil-military) interoperability reduced the significance of traditional military interoperability. Such developments might however be dealt with by means of aforementioned 'good theory'.

Assessing the degree of (broad) civil-military interoperability, Svensson (2011) found that the differences in attitude within Swedish PRT mission were not primarily between civilian and military actors, but rather between the field level and the national level. Contributing to the civil-military field alignment, i.e. broad interoperability, was that the civil and military leadership was on par. Such observations are valuable for the design of a national Swedish comprehensive approach.

It is commonplace to associate Human Rights with Peace Building, especially since Peace Building usually takes place on a UN mandate; and since UN and its agencies are central in upholding and implementing the principles enshrined in the Universal Declaration of Human Rights. Based on five world-wide field studies Gunner and Nordquist (2011) found that agendas of Human Rights and Peace-Building, respectively, were in need of a new partnership approach, recognizing that there are built-in conflicts. This conflict is amply recognized in the October 2011



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NATO Standards (Allied Joint Civil-Military Medical Interface Doctrine, AJMedP-6) that have been agreed by civilian humanitarian actors on the use of military assets. The most important standards are (emphasis added):

*“(1) Military will only be employed on request of a civilian “Humanitarian Co-coordinator”.*

*(2) Engagement of military assets is a “means of last resort”, only considered in the absence of adequate civilian assets to achieve a certain task.*

*(3) All humanitarian engagement has to retain a “Civilian Character”, so military assets will only be in a supporting role.*

*(4) All military effort has to be limited in time and scope, providing a clear “exit strategy” for the handover to civilian actors.*

*(5) All military assets have to respect the UN code of conduct.*

***These standards cannot be entirely accepted by the military, as operational planning is driven by differing imperatives. But these standards need to be known to the military medical planners and recognized as a primary guide to civilian attitudes towards the military.”***

Different standards may come into play at different development phases. These are the acknowledged phases for the International Security Assistance Forces (ISAF) operating in Afghanistan:

*Peacemaking (PM)* involves the diplomat-led activities aimed at establishing a cease-fire or a rapid peaceful settlement and is conducted after a conflict has started. Through comprehensive approaches, the activities can include the provision of good offices, mediation, conciliation, and such actions as diplomatic pressure, isolation, sanctions, or other activities. Peacemaking is accomplished primarily by diplomatic means; however, military support to peacemaking can be made either indirectly, through the threat of intervention, or in the form of direct involvement of military assets, matured into peacemaking.

*Peace Enforcement (PE)* operations normally take place under the principles of Chapter VII of the UN Charter. The difference

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between PE and other Peace support operations (PSOs) is that the Chapter VII mandate allows more freedom of action for the commander concerning the use of force without losing legitimacy, with a wider set of options being open. Even in a PE operation, consent should be pursued through persuasion prior to using force, with coercion through force being an option at any time without altering the original mandate. These operations are coercive in nature and are conducted when the consent of all parties to the conflict has not been achieved or might be uncertain. They are designed to maintain or re-establish peace or enforce the terms specified in the mandate. In the conduct of PE, the link between political and military objectives must be extremely close. It is important to emphasize that the aim of the PE operation will not be the defeat or destruction of an adversary, but rather to compel, coerce, and persuade the parties to comply with a particular desired outcome and the established rules and regulations.

*Peace Building (PB)* involves actions that support political, economic, military, and social measures through comprehensive approaches and that are aimed at strengthening political settlements of a conflict. Thus, for a society to regenerate and become self-sustaining, it must address the constituents of a functioning society. Peace Building includes mechanisms to identify and support structures that will consolidate peace, foster a sense of confidence and well-being, and support economic reconstruction. Peace Building therefore requires the commitment of political, humanitarian and development resources to a long-term political process.

*Peacekeeping (PK)* operations are generally undertaken in accordance with the principles of Chapter VI of the UN Charter in order to monitor and facilitate the implementation of a peace agreement. The loss of consent or the development of a non-compliant party may limit the freedom of action of the PK force and even threaten the continuation of the mission or cause it to evolve into a PE operation. Thus, the conduct of PK is driven by the requirement to build and retain perceived legitimacy. Peace Keepers, will then become Sustainable Peace Builders, and will eventually withdraw into roles as true Partners and Advisers.

The PRT capability mix-up will have to shift along with this moving PRT target, a fact which will be a hindrance to full interoperability: Central Government vs. Field Personnel, Military vs. Civil approach, Society Build-up vs. Human Rights, Rotation

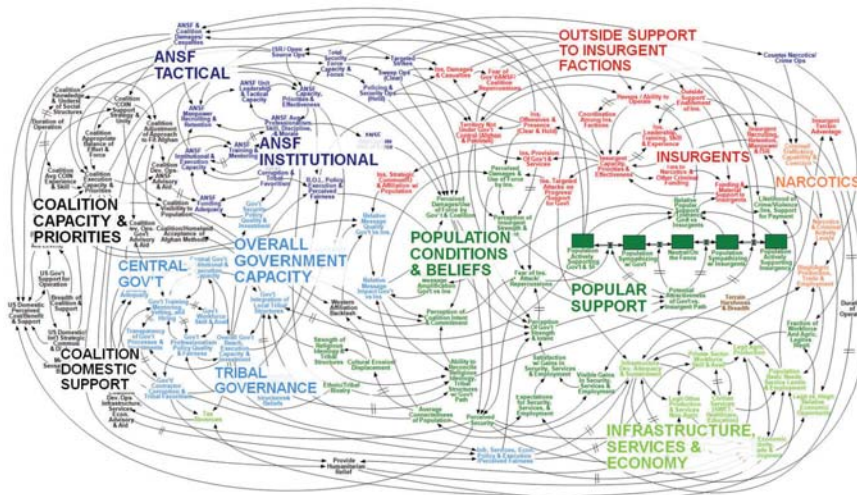
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#n vs Rotation #n+1, and so forth. To this should be added that the 50 ISAF nations and their 25 PRTs to a certain degree have different goals and compositions, not to mention the vast number of different Communities of Interests (COIs) that make up the Islamic Republic of Afghanistan. In general terminology, COI means sharing agreement as to goals. NATO has a more strict definition:

*"A Community of Interest (COI) is a collaborative grouping of users who share and exchange information in the pursuit of common goals or missions." NATO Architecture Framework; NAFv3\_Ann3\_APP07 (2007).*

This self-organized group collaborates by sharing information, ideas, common practices and other resources to pursue and enhance achievement of common interests, processes, goals, or missions. Communities of Interest span institutional structures and hierarchies and are not bound by organizational affiliation. A shared vocabulary enables information exchanges.

The ISAF PRTs is a COI made up of swarms of nested sub COIs that are not stable over time, and when operating in Afghanistan they are tasked to interoperate with an even more complex plethora of COIs. An oversimplified graphic description of the resulting COI playing ground is shown in Figure 2.



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**Figure 2. This illustration<sup>10</sup> was created by PA Consulting Group on behalf of the U.S. Office of the Joint Chiefs of Staff, and shows the U.S. military's plan for "Afghanistan Stability/COIN Dynamics – Security." COIN stands for Counter-Insurgency. Reproduced by permission from the US-based Project on Defense Alternatives (2012)**

As clearly illustrated in Figure 2, the interplay characteristics in Afghanistan are extremely complex. At a summer 2009 briefing in Kabul, Stanley McChrystal (2011), former US commander of allied occupation force, commented that very figure with the words: "When we understand that slide, we'll have won the war". And two years later, reflecting on the 10 years of US presence in Afghanistan: "We didn't know enough and we still don't know enough. Most of us, me included, had a very superficial understanding of the situation and history, and we had a frighteningly simplistic view of recent history, the last 50 years".

It should be noted, however, that Figure 2 has a Counter Insurgency (COIN) perspective, i.e., a military rather than civil perspective. What would then a civil-military PRT perspective be?

It has been argued that the ISAF PRT concept, as introduced by UN, will be "a crucible of civil-military relations in the future" (Frerks et al 2006). For the time being there are 25 PRTs, of which e.g. the one operated by the U.S. is located in a hostile area whereas the ones operated by Sweden and Germany, respectively, are located in more peaceful areas. The U.S. views seem to prevail, and as earlier noted, CIMIC, the Civil-Military Cooperation concept, was used to emphasize the capability to achieve Tactical Consent from individuals and groups in the areas of importance.

From a humanitarian point of view, "PRTs are hybrid structures which have contributed to the blurring if not altogether erasing the distinction between humanitarian aid and military objectives" (Runge 2009). Many civil and non-government organization are therefore distancing themselves from civil-military cooperation (subdues conflicts) and would rather use the phrase civil-military relations (accepts conflicts). For example, for a key organization like the ICRC, the conducting of neutral, independent and impartial humanitarian action in situations of armed conflict and internal violence is at the heart of its mandate and a fundamental

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<sup>10</sup> The picture was widely circulated in 2009, after having been distributed at a press conference (see e.g. [http://worldblog.msnbc.msn.com/\\_news/2009/12/02/4376696-so-what-is-the-actual-surge-strategy](http://worldblog.msnbc.msn.com/_news/2009/12/02/4376696-so-what-is-the-actual-surge-strategy))

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part of its identity. The ICRC seeks dialogue with *all* actors involved in a situation of armed conflict or internal violence as well as with the people suffering the consequences to gain their acceptance and respect. This approach is chosen to give them the widest possible access both to the victims of the violence and to the actors involved. It also helps to ensure the safety of the staff on mission. In relation to these key principles of the ICRC, close co-operation with the military entities of one side is therefore problematic.

## **Interoperability Makes Sense**

If the mission commander is unable to make sense of the big and small pictures beaming up from the mission arena — see Figure 2 — then surely the individual actors may have grounds for feeling like being part of a senseless mission. The individuals have to make sense of what trickles down from ‘higher levels’: the mission objectives, the strategy and tactics implemented in their own units and those of other units, and, of outmost importance, the actions and reactions of the Afghan society.

Not being able to make sense of ‘something’ can be phrased as not being interoperable with this ‘something’, be it organizations, people, signals, tools, or environments. Sense making and situational awareness can be viewed as concepts that enable us to investigate and improve the interaction between people, systems, and technology artifacts. The present paper will however use the more established concepts interoperability and community of interest (COI).

Interoperability is a hallmark for a community of interest (COI), i.e. units sharing and exchanging information in the pursuit of common goals or missions. The units may in turn consist of sub units, etc. ISAF is made up of PRTs, which have military and civil branches, which in turn make up COIs that have to be interoperable vis-a-vis Afghan soil and society as indicated in Figure 2.

A look at the Swedish PRT engagement reveals some interoperability anomalies believed to be present in most of the 25 PRTs at work in Afghanistan.

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### ***Mazar-e-Sharif (led by Sweden); 1 out of 25 PRTs***

Sweden has a military presence in Afghanistan as from 2002, and as a PRT actor as from 2006. In March 2011, in an audit report, the Swedish National Audit Office (2011) published findings and recommendations regarding Sweden's contributions to the international efforts in Afghanistan:

*The Government's political statements and policies concerning international engagements have not been manifested in instructions to the concerned agencies.*

*FBA (Folke Bernadotte Academy) the agency tasked to functions as a platform for cooperation between Swedish agencies and organizations, and their international partners, has not been provided with any means to bring about coordination and cooperation, and has to rely on 'management by education'.*

*FM (the Swedish Armed Forces) has a next to zero civil/military capacity of relevance for international engagements; the Government has not issued a single requirement as to how such a capability shall come about and for what tasks it shall be used.*

As a response to this audit critique, the Government tasked FOI, Swedish Defense Research Agency, for a more detailed account of the Swedish presence in Afghanistan. The telling title of the report is Chasing Synergy (Tham et al 2011), which starts by rephrasing what the Government wants the targeted agencies to deliver:

*A new PRT model – a Transition Support Team – shall be introduced that is expected to be developed to the extent that by 2012 that there will be a civilian command-and-control of the entire Swedish engagement (civilian as well as military) in the Mazar-e-Sharif region.*

*The Swedish PRT shall be targeted toward supporting the capacity build-up of the Afghan security forces. And the new model, planning, management, and implementation, shall take place in a conjoint manner.*

*It is nevertheless of outmost importance that the roles are clearly separated. Humanitarian aid and international military presence must be separated. Yet, there must be synergy between said two efforts.*

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The second part of the report is to some extent the result of a field study tailored toward providing information on the most crucial aspect of what the Government had instructed its PRT actor to do:

*The PRTs approaches have over the years continued to have a strong military component as prescribed in the ISAF doctrines on operational control (OPCON) and counter-insurgency (COIN) respectively. As a result Sweden's comprehensive and balanced civil-military approach has been compromised. The problem is that Sweden has not made it clear how its PRT shall relate to ISAF's doctrines*

*Advised by the Swedish Defense Research Agency (FOI), Sweden in 2010 established a civil PRT office co-located with the Swedish military forces. The office is headed by an ambassador from the Ministry of Foreign Affairs, and rest the staff are advisers from various Governmental agencies (including FOI). Formally, and contrary to the military office, the civil office reports to the Embassy in Kabul. One negative consequence of this organization is that the advisers don't know if they 'belong' to the embassy or to their respective agencies in Sweden. The general view is that this is a hindrance to synergy between the agency capabilities. Another often-voiced view is that the civil office was established too late and is understaffed.*

*As to the civil-military synergy, a major drawback is that there are no common Terms of Reference for the two co-located offices and their meetings. Besides the valued informal information exchange at the meetings, the primary function of the meetings is that the military side can ask the civil side on its views on the military planning and can ask for support for ongoing and planned operations.*

*With regard to Chasing Civil-Military Synergy, the primary obstacles are (i) that there is no formal synergy-enhancing structure in place, and (ii) that there are at least two different chains of command in place. Synergies often evolve on a person-to-person base, but now and then agencies change their PRT representatives. An even more problematic situation is the Swedish International Development Cooperation Agency (SIDA), the most important civil agency in Sweden's PRT, does not have a seat at the PRT ISAF table – nor does SIDA want their aid projects to be militarily 'tainted'.*

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A companion to the lack of Swedish civil-military synergy is the existence of a stark Civil-Military Resource Asymmetry (Egnell and Nilsson 2011). The military part oftentimes has had a long preparation time, comes well equipped and well staffed, and hereby sets the agenda. The military part further more has a tradition of quick and forceful actions, whereas the civil side has a low intensive and protracted agenda. Contributing to the evolvement of biased agenda settings is the fact that the Swedish Government never made it clear what was meant by Coordination Gains (Lackenbauer 2011) and Synergy, respectively.

## **PRTs in general**

In his capacity as special advisor on development for UNAMA – the U.N. Assistance Mission in Afghanistan – Mark Ward (2010) summarized the over-all development of the PRTs:

*The Afghan Government now has a presence in many districts and provinces. They are managing small development projects themselves, as they should. And they are getting better all the time. And funds available to PRTs to do projects have grown significantly.*

*The problem is that many PRTs are still doing short term local projects when the Afghans can do them for themselves, quite often, without being fully coordinated with local Governmental representatives. And many of the PRTs have more funds than the local Afghan authorities. So in many provinces, the PRT is now competing with the local Afghan authorities to deliver services to the communities.*

*So what should the PRTs be doing differently? A few practical suggestions:*

*First, the PRTs should start providing some of their funding to the Government, such as through the National Solidarity Program, so the people see their Government getting things done. The PRTs may be able to play a supporting role, but the Afghans have to lead and be seen in the lead.*

*Second, stop competing with the Afghans and direct PRT funds to those longer term projects which the Afghans do not yet have the capacity to manage. Take on a coordinated multi-year project instead. Don't insist on starting and finishing the project during your short rotation. PRT commanders should not be rewarded for cutting ribbons on short term projects during their rotations. They should be*



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*rewarded for standing back and letting the Afghans do the work, or for starting complex multi-year projects that the local Afghans can't manage themselves.*

*Third, search for and use locally produced items and services whenever possible, be it bottled water, furniture, cement or construction services. When you procure locally you are spending your dollars twice by keeping funds in this country, and within local markets.*

*Fourth, think about a transition plan for your PRT in your region. In some parts of the country, we may be able to turn the PRTs over to the Afghans relatively soon. They need local infrastructure and might welcome the facility you have built. In other parts of the country, where Afghan capacity is not yet far enough along, maybe there is a role for an international civilian organization in the interim. Or your Government may want to use the PRT in the future as a base for civilian diplomatic and development work. The important thing is to start thinking about where you are going.*

## **Managing the Swedish PRT Presence in Afghanistan: To-Do List**

Today's PRT system is based on military considerations and will eventually be replaced by a new model when all civil/military support in 2014 will be fully civil. The Swedish capacity building for the unknown future must be a truly forward looking 'lessons learned' approach:

1. Accept that a PRT is a dynamic concept that needs agile attention and tuning.
2. The comprehensive approach used in Afghanistan should be based on a comprehensive approach originating from Sweden.
3. A 'PRT Office of Comprehensive Approach', at the Central Government Offices, should have decision power across stove-piped ministries and agencies.
4. The PRT Office should be the 'owner', guardian, and implementer of a basic PRT architecture for concepts, missions, and capabilities.
5. Swedish adaptation of the ISAF PRT Handbook.
6. The transition from an all-military to an all-civil mission should be based on reality (facts), and thus should not be calendar driven.

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7. The structures and protocols for meetings in Afghanistan, and reporting back to Sweden, should be formalized.
8. Field personnel recruited from state agencies should report to the PRT Office, and not to their respective base agencies.
9. Field personnel from state agencies and civil society (public) alike should be 'PRT Certified' by the FBA Agency tasked to provide PRT capability training.
10. Training should include "How to separate roles, yet work as a team."

#### Outline of a Basic PRT Architecture for Sweden's PRT Presence in Afghanistan

Returning to Figure 2, there are actually 13 different interoperability domains at the ISAF Counter Insurgent (COIN) side, i.e. 13 different Communities of Interest (COIs). The insurgent side have their own COIs and interoperability domains.

When the figure was released in 2009, it was met with comments such as i) this is the ultimate command and control architecture make believe dream in which all aspect of a war situation is under `control` and can be addressed, or ii) this only shows how far removed the Pentagon gang has become from the Main street pedestrian view that the `project` of occupying a foreign nation to protect security at home is incomprehensible, expensive, time consuming, ineffective and ultimately leads us to be lost in a hopeless `spaghetti logic`.

It is a fact that Sweden is one out of 50 nations participating in an UN-mandated NATO presence in Afghanistan named ISAF PRT, based on civil-military cooperation, and that Sweden is the lead nation in one of the 25 PRTs. A conclusion is that Sweden does need some sort of interoperability & capacity map / architecture to transform from being helpful soldiers fighting insurgents into civil advisors in the (re)building of the institutions of the Afghanistan society.

Let's give it a try!

Let's suppose that there is a sufficient degree of interoperability within the 13 COIs discernible in Figure 2. But we know for a fact that there is a serious lack of interoperability in-between various PRT COIs. When two COIs are trying to make sense of each other, at least two interactions are needed. A complete interoperability sensing-out in-between 13 COIs means 169 time-consuming and costly interactions. There is, however, no need for an all-

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embracing PRT interoperability, and so a system or architecture for task-selective (service oriented) interoperability building would be an extremely useful tool. It should be stressed that interoperability building is a generic concept that incorporates not only vocabularies but more importantly e.g. capability building. And a COI can be a federation of systems.

Now let's move to Sweden.

UN, EU, and NATO are calling!

This is not news to the generals and diplomats. The Swedish Armed Forces have in fact been working on this for quite some time, and presents a structured overview of what it takes for Sweden to participate in the multi-national effort in Afghanistan. The military part of the requested task force, based on civil-military cooperation, seems to be in good shape, so the Government appoints an ad hoc cross-agency advisory group to provide advice, primarily to the ministry of Foreign Affairs, on the softer part of the Afghanistan 'troop'.

Time goes on. Not much is heard in Sweden on the developments in Afghanistan, except for occasional information flares in connection with rare Swedish casualties. The politicians in charge are awaiting the 2014 election. The state-of-the-year-2012-art is that the Ministry for Foreign Affairs without any defined method struggles with the delivery of *civil*-military capacity in Afghanistan, and has a hands-off (or gloves on) approach to civil-*military* capacity.

Figures 3 and 4 are diagrams of the present authors' views on a Swedish agile, modern structure for addressing international efforts. No such comprehensive approach is in place today. With regard to security matters, including the management of a PRT in Afghanistan, an Inquiry (SOU 2011) in March 2011 concluded that:

*The security concept has been broadened over the years and the Ministry of Foreign Affairs (MFA) has a responsibility that has been expanded without this being defined or the division of responsibilities between ministries being clarified. The Inquiry proposes that this be done. The MFA must actively take the lead and provide support for the rest of the Government Offices.*

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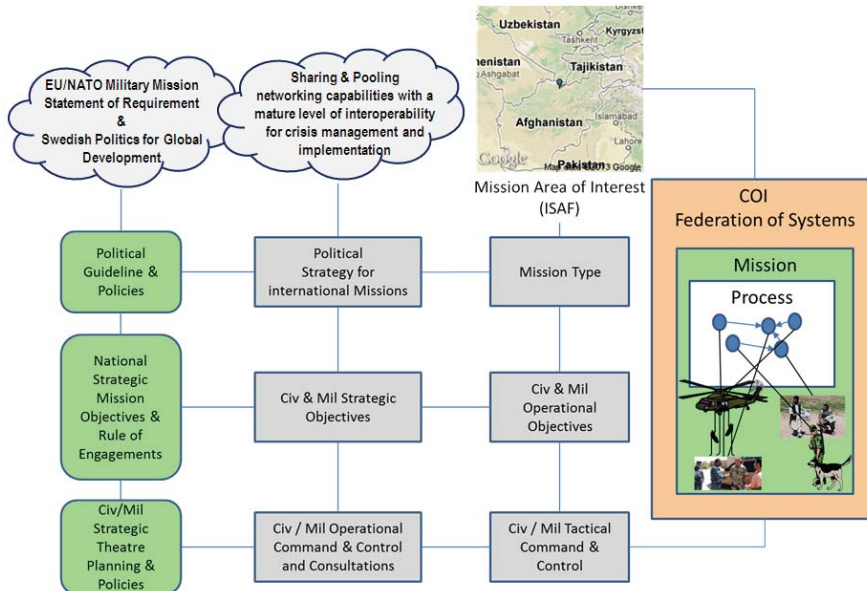


Figure 3. Proposed diagram for future mission networking capabilities.

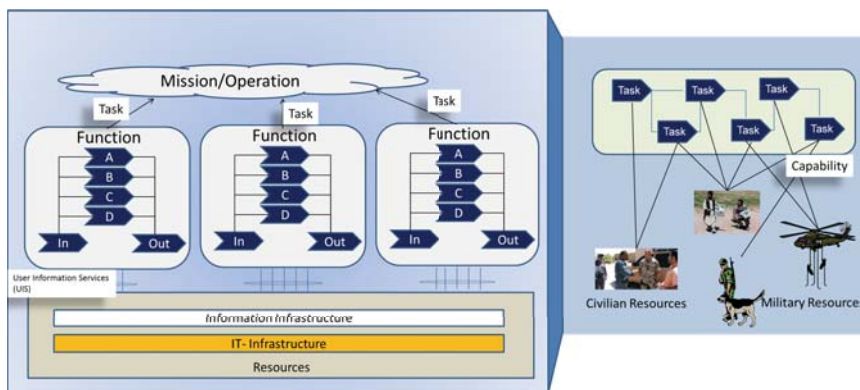


Figure 4. Complementary view of the 'engine box' (see Figure 3). Information services cater for the needed information exchange between mission actors. This takes place by means of infrastructural channels and product.

Components of the 'engine box' (Figures 3 and 4) are already up and running at the Swedish Armed Forces. In line with #3 in aforementioned "To-do List" – and in response to the Inquiry – the Government should take charge of this 'box' and turn it into a Comprehensive PRT Office of sort. Standardized operational procedures should be used for achievements to be delivered.

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Information infrastructure (Figure 4) is a socio-technical concept emphasizing that service takes place within existing infrastructures, including the whole network of technology, vendors and customers (Bygstad 2010). It is not an easy task to bring together military and civil into such a joint planning environment. But it must be done, especially as the PRTs are required to develop from fully military to fully civil. Some of the merging issues are illustrated in Figure 5. The Swedish Government has on the other hand acknowledged that support is available:

*Sweden shall make use of the civil-military dimension, at least whenever this results in added value. This cooperation builds both on our Partnership in the Euro-Atlantic Partnership Council and the Partnership for Peace, including our participation in NATO-led peace-support operations in the Balkans and Afghanistan, and on cooperation between the EU and NATO on EU-led crisis-management operations. This cooperation gives Sweden access to civil and military expertise, as well as experience and strategic resources. Sweden's cooperation with NATO in EAPC/PfP, Article No.: UD05.018, 2005*

## **An Engine for Interoperability, Capacity Building, and Change Management**

In December 2011, the European Commission presented a package of measures to overcome existing barriers and fragmentation across the EU, as part of the Digital Agenda for Europe. The package was named Open data -- An engine for innovation, growth and transparent governance, COM(2011) 882 final, and was focused on areas where the functioning of the internal market is at stake and where common standards and approaches will lead to new and better services and information products for the European consumer. They build on and do not affect the national regimes for access to information.

In January 2012, the Swedish Parliament decided to support the Government position that the Commission's Open Data Proposal should be rejected with reference to the subsidiary doctrine. That is, the fundamental doctrine that policy making decisions should be made at the most decentralized level, in which a centralized governing body would not take action unless it is more effective than action taken at a lower government level. Reference to this principle is often used by EU Member States which for one reason

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or other are unhappy with decisions from the European Commission. Such requests are rarely successful beside from the benefit of some 4-6 years of leeway. With respect to the 'open data engine', this means that Swedish Public Authorities can keep charging for public data for several more years.

A subsidiary doctrine of sorts has been used in Sweden for hundreds of years, to the effect that the Government only (can) tell the state agencies what to do, not how to do it, and that ministers as a result are using hands-off approaches towards agencies.

That very self-applied doctrine is the explanation for the lack of a central Government PRT engine, see Figure 1. The doctrine should, however, NOT be applied in this case. More effective actions can NOT be taken at a lower government level, be it civil, military or civil-military.

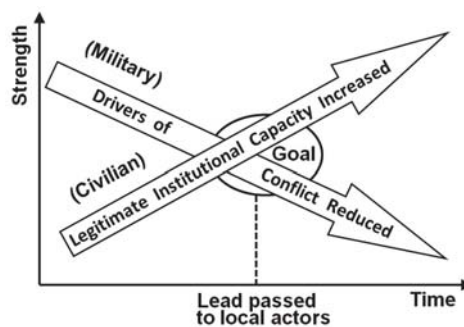
Let there be an Engine for Interoperability, Capacity Building, and Change Management, as symbolically depicted in Figure 5.

And let it be fully understood that said engine is a generic concept for handling any kind of knowledge in any kind of Community of Interest:

- people
- skills
- missions
- software

**The challenge of civilian-military coordination**

USAID	Military
Bottom-up, based on analysis	Top-down, based on commander's intent
Resource constrained	Not resource constrained
Sustained engagement	Mission oriented
Implemented by partners	Implemented by US and allied military personnel
Locus: in-country	Locus: Combatant Command



**Figure 5. Left: The planning environments for civilian vs. military efforts [Civilian-Military Operations Guide, USAID's Office of Military Affairs, Ver. 1, 2010]. Right: Spectrum of conflict transformation [ISAF PRT Handbook, Ed. 4, 2010]**

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The envisaged Engine for Interoperability, Capacity Building, and Change Management is a major administrative undertaking. Niccolò Machiavelli (1469-1532), the founder of modern political science, had this to say about such undertakings (Machiavelli 1532):

It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order, this lukewarmness arising partly from fear of their adversaries, who have the laws in their favor; and partly from the incredulity of mankind, who do not truly believe in anything new until they have had the actual experience of it.

## **Systems Thinking is Mandatory**

On March 12, 2012, the Swedish PRT was officially declared as a civil mission headed by an ambassador reporting to the Swedish Foreign Service (SFS) the military troop will probably not be reduced until late 2014. Earlier, on February 2011, a Government Expert Group on Public Economics (Murray 2011) called for a thorough SFS modernization with regard to efficiency and effectiveness, because:

*Besides SFS, several ministries — e.g. defense, finance, environment, industry, and justice — have equally as important Foreign relations issues as do Foreign aid and trade. The general mechanism for coordinating Government policy is joint preparation based on the collective decision-making of the ministers in the Cabinet. Indeed a complicated matrix organization with entangled administrations and politics, and as a result there is no defined business case but a business characterized by “one damned thing after another.” The solution must be to have three separate ministries, for Foreign Policy, Foreign Trade, and Foreign Aid and Development, respectively.*

Niccolò Machiavelli would probably have advised Sweden not to split SFS into three ministries. OK, says the report from The Government Expert Group on Public Economics, it may possibly work without a split, but here are some of the must-haves in relation to e.g. the Swedish presence in Afghanistan:

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- Develop a mission and business idea
- Introduce a clear line of command
- Clarify that missions are part of the Government Offices
- Establish a project organization
- Develop a “learning organization”
- Develop information technology for the needs both of the Ministry for Foreign Affairs, as well as for the Government Offices as a whole
- Establish a position as administrative head of the entire SFS
- Concentrate and strengthen the control of the agencies involved
- Strengthen the control of the ministry by both the Parliament and by the Government
- Broaden recruitment to the FS
- Make personnel administration a joint function for the Ministry for Foreign Affairs and the Government Offices
- Develop business data, monitoring and evaluation
- Summon the staff of the Ministry for Foreign Affairs into one, modern office

The common denominator for the above bullets is that there must be a Framework in the form of a High Level Architecture and an analysis according to Systems Thinking.

In the hard, concrete, physical world, a framework is a structure for supporting or enclosing something else, especially a skeletal support used as the basis for something being constructed. In the soft, cognitive, management world, a framework is a set of assumptions, concepts, values, and practices that constitutes a way of viewing reality and providing core directions.

Architecture is, within systems engineering, defined as “fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution” (ISO 42010). Consequently, in a social system “fundamental” concepts and properties refer to people-elements and inter-human relations, formal and informal power positions, objectives, preferences and law. Originally the High Level Architecture (HLA) concept was developed in the US Department of Defense and later applied in the Swedish Network-Based Defence Initiative (Wang et al 2008). A HLA provides the



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specification of a common technical architecture for use across all classes of simulations. It provides the structural basis for simulation interoperability. It is likely to be useful when planning and preparing for missions, new as well as ongoing, in order to test equipment and procedures.

A system is a set of elements that are interrelated or interact with one another for a certain purpose within a larger whole – the system. A system has emergent properties which ideally mean that the whole is more than the parts.

Systems thinking can mean two different approaches. The first is the seemingly attractive and applied but not suitable type of systems thinking in terms of engineering, modeling, design and construction (Checkland 1999). It dominates the political and military thinking and acting but it is not enough, instead opening for negligence towards the abundant social, cultural and political PRT-issues we have described. Worse, the concepts involved in the architectural foundation for this kind of systems approach do not allow for making sense of the operational theatre (What is going on? What to do?). The underpinning ontology may become corrupt.

Therefore, in accordance with our previous statements when applied on a social system, the second kind of systems thinking is a way to apply a unique perspective on (the social) reality, which sharpens the awareness of the whole (i.e. the system in focus) and its inter-related parts (subsystems). This way of systems thinking aims at discovery, learning, diagnosis and dialog for better understanding, definition and work with systems, possibly through modeling (Haskins 2007). It is through communication, a suitable hierarchy and control that this whole can demonstrate the previously mentioned and desired emergent properties as a system, and survive in a changing environment. This is applicable on any organization, whether it is a ministry, a Non-Governmental Organization (NGO) or a PRT/TST. Those in command or in office should understand these fundamentals which actually are possible to track back to Machiavelli's principles that we have referred to.

Unfortunately, the record of PRT-deployment indicates that the first type of systems thinking dominates, possibly because it legitimates impaired and detached managerial control in favor of an all too political control system which prioritizes its own endurance at the cost of the PRT-survival. Another explanation to

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the current situation is a common lack of organizing competence and system insight, something that can be cured however.

There will be an opportunity to apply the outlined type of systems thinking in the next phase of the Afghanistan mission. Sweden and Finland have been partners in the Swedish led PRT in Mazar-e-Sharif. It will be business as usual in the near future, but the PRTs (Provincial Reconstruction Teams) will be renamed TSTs (Transitional Support Teams). The military TST component will gradually disappear, but it is doubtful if the Swedish civil support to Afghanistan will be channeled via the TST in Mazar-e-Sharif. There is however no doubt about the Swedish commitment; as from 2013 Afghanistan will be number 1 recipient of Swedish Foreign aid.

## **Lessons learned**

The above bullets on developing a learning organization are addressed by The Centre for Army Lessons Learned, and in particular by its US Afghanistan PRT Handbook. The published lessons learned and best practices are actions that PRT members have employed to overcome situation-specific obstacles and achieve a desired outcome; and they have been shared with the US allied ISAF partners (including Sweden). "These should not be interpreted as 'one-size-fits-all' solutions or doctrines. What works in one place and time may not work in another place and time. Rather, these are actions that have been effective in the past and that should be considered by future PRT members. Deployed personnel must use their own discretion to determine whether such actions or suggestions would be useful in their particular circumstances."

The PRT Handbook is not a doctrinal product. The information provided is written by US Government employees for those individuals who will serve in a stability and reconstruction environment. The handbook describes an architecture framework in the form of an analysis and program management process specifically designed to help practitioners improve stability in a local area. The framework's four steps are i) Situational awareness, ii) Analysis, iii) Design, and iv) Monitoring and evaluation. It encourages unity of effort by providing field implementers from various organizations with a common framework to:

- Understand the environment from a stability-focused perspective.

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- Maintain focus on the local population and its perceptions.
- Identify the root causes (sources) of instability in a specific local area.
- Design activities that specifically address the identified sources of instability.
- Monitor and evaluate activity outputs and impacts, as well as changes in overall stability.

It is of outmost interest that The International Council of Swedish Industry together with the non-profit Swedish Institute of International Affairs has published a report (Andersson, 2011) calling for such a framework for analysis with regard to corporate activity in sensitive markets characterized by conflicts.

Sweden has contributed troops to ISAF as from 2001. On June 1, 2012, the Swedish military personnel rotation #23 was on duty, amounting to a troop of 500. As informally agreed at the NATO Lisbon Summit in November 2011, the ISAF mission withdrawal would begin in 2011 and would be completed by the end of 2014. Sweden's gradual withdrawal will be carefully planned, starting with troop rotation #24. Some of the 50 nations contributing to ISAF have political problems with the proposed gradual withdrawal agenda. By way of example, after an Afghan soldier in January 2012 shot and killed four French soldiers on a base in eastern Afghanistan, France immediately suspended military training and assistance for Afghan forces and set its national final withdrawal date to the end of 2013.

France is not the only ISAF nation setting an agenda of its own. Such behavior is to be expected when 28 NATO members and 22 other ISAF nations join forces in a dangerous multiyear mission. In such an environment there will always be a degree of non-interoperability between nations, between military the civil and operations, and between actors within operation.

These events witness of the need for careful analysis and measures to be taken.

## **Conclusions**

The problems and frustrations experienced by Sweden in connection with participating in the UN-mandated NATO presence in Afghanistan are by and large shared with other nations. Recent Swedish investigation have pointed out that the

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Government is in need of modern tools and management structures, not just with regard to Afghanistan but for Sweden's ever increasing international engagement, in public as well as private sector. Recommended keywords for the future are High level architecture (for simulation during design and planning) and Systems thinking (adjusted for social systems), areas in which the experiences from the Swedish Armed Forces should be reused. It is necessary, however, to realize what the system is before pure engineering principles are applied, and that politics includes risk-taking and responsibility, not only political survival. Specifically, crucial systems aspects to consider are about hierarchy, distribution of authority, communication and control in order to make different organizational elements form a well-functioning whole. Just chasing synergy is not enough – it should be calculated in the design and planning phase of a mission.

During the NATO Summit in Chicago, May 20–21, 2012, Sweden and Finland jointly pushed for increased ISAF attention to interoperability and capacity building during the orderly withdrawal process. This is in line with the smart defense concept introduced by NATO Secretary General Anders Fogh Rasmussen; ISAF members are facing fiscal restraints and NATO must see to it that resources should not be wasted as a result of capability and interoperability insufficiencies. We believe that an analysis based on systems thinking will clarify the practical requirements to achieve proper interoperability because communication is a crucial capacity, not only in technical terms.

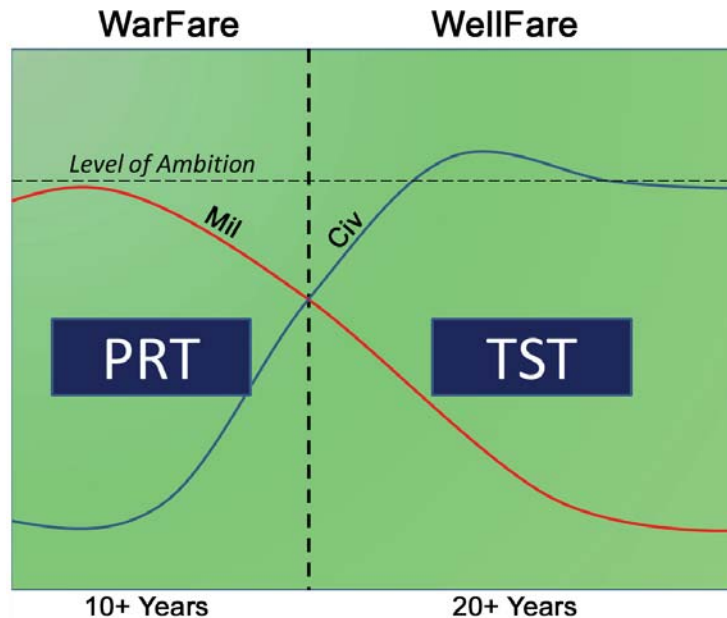


Figure 6. A GamePad view of the military/civilian dynamics as outlined at the NATO Summit in Chicago, May 20–21, 2012.

The 'smooth' view in Figure 6 should be compared to the more chaotic (realistic?) view in Figure 2. What cannot be contested however is the urgent need for a smart foreign support architecture focusing on interoperability and capacity building.

Finally, there is also no doubt about the need for a Swedish 'smart' Foreign support architecture focusing on interoperability and capacity building. By 'smart' is meant that one should pick up elements from the rapid Internet development regarding e.g. Open Government Data and Social Media (Klang & Nolin, 2011). The uncovered central government shortcomings when handling the PRT issues must not continue in the TST era and beyond, be it Swedish civil, military, or civil-military activities at foreign soil.

We feel it necessary to remind that interoperability is more than technical connections, and that capability building exceeds systems engineering but can rely and presuppose it. The examples and lessons learned demonstrate the need for tailoring missions and teams to actual conditions, and to share experiences between nation states.

We point at the need for joint training and education of policy makers, civilian and military officials, the adaption of objectives to

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circumstances and to realize that capability is not an object or machine. It grows from commitment and motivation. Properly used, systems thinking can counter the tendency to execute faceless, anonymous political control of missions abroad by admitting too many cooks around the kettles letting each one get a spoon instead of classical principles such as unity of command and accountability for a coherent effort. Maybe the “one damned thing after another”-process can be succeeded by one that is less random.

The weaknesses in the Swedish approach was further uncoiled to the general public when the armed forces commander-in-chief in December 2012 concluded that without further funding Sweden could not be defended against a general invasion for longer than one week (O'Dwyer, 2013). The prime minister responding by saying that defense was a special interest area with no higher priority than any other of the state's many areas of politics. The problem is, however, as seen in Figure 1, that the government needs architecture and systems thinking in the balancing and interoperating of the special interests at hand.

## **About the authors**

Olov Östberg is Professor emeritus at Mid Sweden University. Olov has held professor positions in Sweden, Japan, USA and UK. He has been granted four patents. The present paper is #238 in his CV, which covers areas such as Occupational Safety and Health, Industrial Engineering and Psychology, Human Factors, Human Computer Interaction, and Circadian Rhythm. Interspersed with research, he has spent 25 years with Public Administration Agencies providing advice on the role of eGovernment.

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