

## **Defence Transformation with Frictions – The Case of Sweden**

**Jan Foghelin**

The Swedish Defence Research Agency (FOI)  
Division of Defence Analysis  
Gullfossgatan 6, SE-164 90 Stockholm  
SWEDEN

[jan.foghelin@foi.se](mailto:jan.foghelin@foi.se)

### **1. ABOUT TRANSFORMATION**

The armed forces are changing all the time depending on new tasks, lessons identified, new technologies which could be used etc. A transformation process is always going on.

The word transformation has however, since the end of the Cold War got a somewhat more specific meaning e.g.:

- Transformation concerns structural changes of the armed forces during a period of rapid adaptation to new conditions (Garstka 2005).
- Transformation concerns a period when you change the main task of your armed forces from defending your territory to expeditionary tasks. Changing the defence structure is often necessary e.g. a transition from a compulsory conscript system to an AVF. (Haine 2005; MILITARY BALANCE 2010:103; Moore 2003:2; Witney 2008)
- Transformation concerns a period when networks become an important enabler in the armed forces.

Even if all of the above mentioned possible interpretations are of interest for the case of Sweden a more humble approach has been chosen namely why and how have the Swedish armed forces been changed since the end of the Cold War.

### **2. AN INTRODUCTORY NOTE CONCERNING FACTORS INFLUENCING ON TRANSFORMATION**

There are several factors influencing on the direction and speed of the transformation process. To my assessment and in order of importance the key factors are the following:

- The legacy. Only a small share of the total defence capital (personnel, materiel,...) is renewed annually. In combination with long term binding contracts the legacy sets important limits for possible speed of change.
- The political guidance and decisions. In Sweden these come from the Parliamentary Defence Committee (all political parties take part), the Government and the Parliament.
- The Armed Forces HQ. Starting from the political guidance the HQ propose more detailed plans.
- The analytical community which gives support both to the political level and the HQ.

A few words should also be mentioned about sources:

- The main sources concerning what happened within the Swedish Defence during the period 1990-2009 are of course different publications from Sweden (mostly in Swedish). Moreover the author

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of this paper has been working at FOI during the period and has got a personal insight into parts of the transformation process.

- The Swedish defence and defence debate does not exist in a vacuum. There are many influences in several dimensions from abroad. References are for this reason also given to international publications.

### **3. THE LEGACY**

For good and bad you do not start your transformation from scratch. You have a legacy which is very important for time and resources needed for a certain transformation. There are several aspects of the legacy to take into account.

- You can have a force structure in your legacy which could be close to the new structure you want or it could be distant.
- The legacy consists of physical entities like platforms, weapons, personnel, buildings, land etc.
- Associated with the physical entities there are also bindings for the future. One example could be contracts with a defence industry concerning deliveries and/or maintenance of materiel. Another example could be the possibilities to get rid of personnel or change a compulsory conscript system.
- Parts of a legacy are also processes (e.g. acquiring processes for military materiel), laws and regulations.
- Less tangible but still important are different aspects of culture (“in Sweden we have always done it like this....”)
- Culture does not necessarily have to be a problem e.g. a culture positive to change can facilitate transformation.

A short historical background for the legacy built during the cold war period:

As always in history there are controversies. It must be stressed that this background is my interpretation. Sweden was not well prepared for WWII. We did not have a strong military defence. Neither did we have a sufficient defence industry for our needs. There were important lessons learned from the shortcomings.

After the war a Scandinavian defence alliance was discussed (1948). It stopped however by discussions and when NATO was agreed upon 1949 Denmark and Norway joined but not Sweden.

The Swedish Defence during the Cold War period rested on four principles “pillars”:

1. Sweden should be non-aligned in peace-time aiming at being neutral in case of war (the so called neutrality policy)
2. Sweden should have a “total defence”. The “total defence” concept meant that all societal functions should support our defence. They should be prepared for these tasks.
3. Sweden should have an indigenous defence industry capable to develop and produce most of the system needed for the Swedish defence.
4. A compulsory conscript system.

During the Cold War it was considered important that the defence had a strong support by the Swedish people. The points above plus presence of the defence in most provinces of Sweden contributed to this.

The Swedish defence was built on these principles during the Cold War period. The build-up started during the WWII. After the Cold War there has step by step been made changes.

Sweden had during the Cold War competence to develop and produce systems as e.g.:

- AA artillery and missiles
- Anti-armour systems
- Howitzers
- Armoured vehicles
- Surface vessels
- Submarines
- Minesweepers
- Mines
- Coastal artillery
- Aircraft
- Air-to-surface missiles

The Swedish Government was responsible for the survival of the indigenous defence industry.

Planning was made in a way that made continuous development and production possible.

Only a minor part of the total production of defence materiel was exported during this period.

Towards the end of the Cold War period some difficulties with the defence industry and conscript system pillars showed up:

- Increasing costs for new generations of weapon systems in combination with defence budgets which were not increasing created stretched out development and production cycles.
- The compulsory conscript system gave a large army by numbers. It became more and more difficult to arm the soldiers properly.

During the seventies the non-commissioned officers were abolished from the Swedish Armed Forces. Age of retirement for officers was successively increased to about 60 years of age. Due to Swedish labour legislation for officers they could not be fired.

After the WWII not only an indigenous defence industry was considered important but also research for the military sector.

- 1944 an Aeronautical Institute was founded (FFA).
- 1945 a Defence Research Establishment was founded (FOA). The roots of this establishment was a military-chemical institute (protection against C-means), a military-physics institute (dealing with anti-armour e.g.) and an institute for electronics (radar mainly). A department for studies and planning was decided in 1958. In 2001 the National Defence Research Agency (FOI) was created through the merger of FFA and FOA.

These institutes were financed by the Government by appropriations. They were problem orientated. There was an important impact from the customer (the military defence) on the selection of problems to be handled.

During the Cold War period there was a consensus (among major political parties, in the public opinion) concerning the most important threat towards Sweden's security. It was a major attack from the WP/SU.

Most of the defence resources were allocated to the military defence. We had however also an ambitious civil defence in accordance with the “total defence” concept. There were shelters for the civil population and stocks of strategic goods (in case of problems with export/import). Swedish units served in UN peace keeping missions during this period. Economically these missions were however not a heavy burden.

The Cold War period can be characterised as a period of stability and continuity. This is valid both for the threat and for the defence (including ways to produce the defence).

Assessment of the legacy considering the need of change after the Cold War

Personnel:

- The Swedish labour legislation for officers has made it difficult to adapt (number, age structure) to changing requirements
- The compulsory conscript system has given good opportunities to recruit qualified soldiers. It is however not well suited for larger number of soldiers taking part in international operations on short notice. It is not compulsory to take part in these you have to be a volunteer. It is also a political problem to talk about a compulsory conscript system when only ~20% of the male population or less do their service.

Materiel:

- Binding contracts, tacit agreements etc have resulted in deliveries of materiel up to about now. An extreme example is the Swedish fighter aircraft (JAS 39 Gripen) which was decided on 1982 (development). It has been delivered up to now and has constituted 1/3 of the materiel acquisition outlays in the post Cold War period.
- Most of these Cold Wars system could be used but the numbers (e.g. aircraft), the size (Corvettes) and the timing have not been optimal.
- The materiel acquisition process in general is more suited for a slowly changing force than an agile process for more sudden needs in international operation.

## 4. STRATEGIC DIRECTIONS

### 4.1 Awaiting for a “New World Order” 1990 – 1999

One important factor influencing on the time to change defence concept after the end of the Cold War was the geographical distance from the Russian border. States closer to the border were more cautious before changing priorities from defence towards a Russian attack. Sweden is rather close to Russia so it is understandable that it took ten years to state that Russia was not a threat against Sweden (at least not for the foreseeable future i.e. at least a decade).

During this period it was not however a question of a grand attack from Russia towards Western Europe. It was more problems of different types emanating from an empire in decay.

There were of course great uncertainties concerning the problems which could arise.

The Swedish defence policy was focused on keeping a guard against a not well defined (neither the time, nor the type) potential threat.

Territorial defence and crisis management were considered important. The basics of the Swedish defence (non-aligned, indigenous defence industry, compulsory conscript service) were not changed.

The volume of the Swedish Armed Forces was however reduced during the period. A key-word during the period was flexibility and above all adaptability. The uncertainties in the tasks should be met, by an ability to adapt. Adapt by changing the volume of defence and/or the type. Options which could be used in a need of change situation became important and should be created. To get and react on early-warning signals was a part of the concept. The idea of adaptability is in principle good (compare the British “Green Paper” MOD.UK.2010). There were however some “practical” problems.

- an easy way to keep options was to keep part of the personnel and materiel on a lower level of preparedness. This could be a good idea in certain cases but it was probably used too often.
- it was not so easy to create options in the form of new units and systems. It is difficult to just keep it as an option or to develop it enough to be used rapidly.
- there seems to be difficulties (not tested in reality) to read rightly weak signals in noise and at least to politically react on these signals. When you have a real crisis you cannot miss it but then it is too late to use most of the prepared options.

### 4.2 Strategic “Time-Out” 2000 – 2004

In the report from the Parliamentary defence committee (Ds 2001:44) and the Government bill from the first half of 2000 the threat against Swedish territory was assessed to be low (incidents) for the foreseeable future (up to ten years). What was needed from the Swedish Armed Forces in the near and middle term was a defence against incidents and some units which could take part in international operations.

In the Armed Forces HQ (and their long range planning) the interpretation of the political guidance was “a strategic time-out” i.e. a period of at least ten years which should be used to transform the Swedish defence adapted to new future threats.

In the late nineties, contacts had been taken between USA and Sweden concerning RMA (Pentagon/Net Assessment etc). The next buzz word was NCW. With great enthusiasm the NCW-concept (called NBF in Swedish) should be used to transform the Swedish Armed Forces in 10-15 years time. An ambitious study activity started (including demonstrators, experiments etc). New technical systems were not the only components studied (organisation etc was also included). Still it is fair to say that the main driver was technology push (ICT primarily).

From the policy change of the year 2000 there was no longer a state or states singled out as the threat. Instead it was said that the political will to have certain capacities should be included in the force structure. The Swedish NCW and control by capacities was not really a success (probably no consensus concerning this) depending on:

- You did not have concrete examples of threats and tasks. To construct defence structures from generic antagonists is seldom successful. (Boot 2006; Kagan 2006; Murray and Knox 2001). You could imagine that NCW should have meant improvement for the Royal Swedish Navy during the Cold War but not for the Army in Afghanistan.
- There were problems to take the steps from power-points to products. Not much of the NCW-activities ended up in defence materiel. (FMV 2010).
- The human behaviour was not taken into consideration enough. If a Homo Sovieticus was necessary to make the Soviet Union work a Homo NCW should have been necessary to make the NCW defence work.
- Cost aspects were not enough taken into consideration.
- To summarise about NCW: many studies were performed during the 2000-2004 (2009) period in the spirit of NCW but little had an impact on the development of the Swedish Armed Forces structure.

- The idea that the political will (should) decide in capacities could function in the area of the Swedish contributions to international operations [(e.g. contributions to the EU Force Catalogue (HHG))].
- In the end the political level should decide about capacities but they must have support for this. Without any serious studies concerning possible tasks and as a follow-on units special interests, lobbying etc will dominate.
- A few words about the impact of 9-11. It was considered to be an important incident and Sweden gave support to the USA in Afghanistan (SF to begin with, and later on army units) but it did not have a great impact on the force structure. Within Sweden it was decided, after some discussions, that the responsible for counterterrorism within Sweden was the police. If needed the police could ask for military resources, then under police command. The incidents in Madrid (2004) and London (2005) strengthened the EU counterterrorism co-operation; mainly concerned was the civilian side. Counterterrorism outside Sweden however was a military task. This was seen as a part of international operations which were increasingly considered to be of importance. Counterterrorism was not the only argument for international operations however.

### **4.3 Crusades 2005 – 2008**

The period of the policy of a long-term restructuring (buzz words: NCW and TRANSFORMATION) was followed by a period of near-term interest of taking part in international operations. An especially visible part of this was the first Swedish responsibility for an EU Battle Group (NBG) in spring 2008. New buzz words succeeded NCW and TRANSFORMATION namely EBO and CA later on also EXPEDITIONARY OPERATIONS. The EBO concept was not really helpful in Afghanistan or elsewhere.

The problem with the expeditionary operations concept was among other things the lack of strategic airlift (e.g. for the NBG). This was not unique for Sweden but still a problem.

Even if taking part in international operations was prioritised the volume (number of soldier man-years) remained unchanged. (~900).

Two important policy changes were discussed during this period, concerning personnel and the materiel acquisition strategy.

The new government was not committed to the one type of officers system which was introduced in the seventies. They planned to reintroduce the non-commissioned officers. The compulsory conscript was not very practical for taking part in international operations. An AVF was studied and later proposed and decided upon (June 2009). The AVF should start in the summer of 2010.

The Cold War-period materiel acquisition process showed drawbacks during the post Cold War period. The long contracts and other commitments to the defence industry made the materiel planning rigid. It was impossible to make reallocations to new materiel which was not planned since a long time back. Especially for the international operations you needed new material on short notice. An agile acquisition process was needed. A policy change to buy as a first priority off-the-shelf was proposed and decided on.

Another idea which has flourished during the last couple of years is increased Nordic defence cooperation. In the midterm mainly to save money (Ljung 2007) but in the long-term also by coordinated operations. This cooperation is however not meant to replace EU and/or NATO cooperation but a complement.

It is too early to say what will be the real outcome of this initiative. It is however worth mentioning that even if the Nordic countries stand close to each other when it comes to values and societies in general they are quite different in their views on defence (Bailes 2007; Heurling Ed 2007).

So after almost twenty years since the end of the Cold War the structure of the Swedish Armed Forces had been transformed if not to an expeditionary operations structure to a structure which could serve as a good basis for the transformation to an expeditionary operations structure. Then came a little war that shook the world – the Russian attack against Georgia. (Asmus 2010).

#### 4.4 Post Georgia 2008 –

There are several reasons for the Georgia war as:

- A hot tempered Georgian President and Government
- A more assertive Russia. (Zagorski 2009).
- A lack of constructive EU and NATO's engagement in the Georgian case since the beginning of the nineties (including the handling of Kosovo and the NATO summit in Bucharest).

In the Baltic Sea region and elsewhere the Georgian war intensified a debate which had started earlier.

The debate concerned the following topics:

- How should Russia under the leadership of Putin and Medvedev be looked upon: as a partner in trade, counterterrorism, non-proliferation etc and/or a potential attacker.
- Could you trust the new NATO's commitment to art. 5 of the treaty? There should at least be some contingency planning for the defence of the Baltic countries (and Norway).
- Could Sweden be involved in military operations in its neighbourhood (support to the Baltic countries and/or territorial defence of Sweden).
- Already in the Parliamentary Defence Commission report from 2004 a kind of "solidarity clause" was formulated. (Ds 2004:30 p 40).

"It is difficult to imagine that Sweden should take a passive stance if another EU Member State would be attacked. It is equally difficult to imagine the other EU Member States would not act in the same way". This "clause" has been repeated since then in slightly different formulations (e.g. 2009):

"In the Statement of Government Policy, the Government emphasises that the security of our country is founded on community and cooperation with other countries. Sweden will not take a passive stance if another EU Member State or other Nordic country suffers a disaster or an attack. We expect these countries to act in the same way if Sweden were affected. We must be able to give and receive military support". You can notice similarities with NATO art. 5 and the EU Lisbon treaty art. 42.7.

From the appropriation bill 2009. (Sw MoD 2009)

The main items of the bill are:

- The entire operational organization of some 50 000 people will be able to be used within a week after a decision on heightened alert. Today only around one-third of the national operational organization is equipped and prepared for an operation within one year.
- All operational units will have the same capability for operations, in Sweden and within and outside our region. This means that the division now existing between the international force for operations abroad and other units will be removed.
- According to the Swedish Armed Forces' proposal, 28 000 people will be in permanent and contracted units.
- The Home Guard will be strengthened and will have a more important role in defending Sweden. The Home Guard will consist of a total of 22 000 people and will be part of the operational

organization. Of these, 17 000 will make up the qualified national protection forces, who will be given better training and military equipment and will be under a service obligation even in peacetime.

- An increase from three available man oeuvre battalions today, to eight tomorrow. This means more than twice as much availability.
- Twice as much capability for peace-support operations. It will be possible to keep 1 700 people in continuous engagement in international operations.
- The number of Gripen aircraft will be 100, of the C/D model. The number of new helicopters will successively increase. Main battle tank 122 will be retained and access to splinter-proof vehicles will increase. Artillery and anti-aircraft capability will remain of the same size as today. There will be seven corvettes, five of Visby class; the number of submarines in the operational organization will be retained.
- Outside the operational organization, a reserve unit of four mechanized battalions will be available.
- Personnel supply will be modernized so that voluntary participation will be the basis of manning the operational organization instead of compulsory military service. This will be required for greater functionality and availability, but also for the transition to permanent and contracted units. The officer profession will be changed, with more specialist officers who train and command troops and fewer people in staff and command functions.

Question marks concerning a couple of the main items of the bill:

- All operational units will have the same capability for operations, in Sweden and within and outside our region”.

The problem is the very different type of task, enemy, terrain etc which you meet in Afghanistan or in the Baltic countries (as an example). You need different training, different equipment etc. As an example of difficulties you can take the Georgian battalion trained and equipped for service in Iraq and its problems against Russian armoured forces.

- “Twice as much capability for peace-support operations”.

An increase in the number of soldiers engaged in international operations has been announced several times during the period 2000-2009. There seems however to be problems to realize.

- “Personnel supply will be modernized so that voluntary participation....”

As often “the devil is in the details”. Laws and regulations have to be changed....  
It remains to be seen if the quality and quantity needed could be recruited.  
(Santesson 2010).

## **5. ANALYTICAL SUPPORT TO THE LONG RANGE PLANNING**

Most analysts within our Agency have a general idea of a long range planning process which corresponds to NATO: document (NATO/RTO-TR-069 2003) (see also Foghelin 2007; Foghelin 2008) i.e. scenarios + structures + assessments through gaming and simulation + recommendations concerning strategy. In principle this kind of process existed within the Swedish Armed Forces until the end of the nineties. Then the ambitions decreased. Scenarios/security policy analysis were still there as well as future force structures with difficult emphasis (territorial defence, taking part in international operations etc). The ambitions to do gaming and simulation were however low. Possible reasons:

- There was no obvious adversary (the idea was to go from threat-based planning to capacity-based planning).
- The war gaming and simulation was considered (true!) time-consuming (military personnel + analysts) and expensive (investments in simulation models).
- There could be interests by special parties not to have an ambitious assessment.

Instead of much assessments several analysis were made concerning the buzz-words from the USA (RMA, NCW, EBO, CA, EXP. OP....) these reports can be characterized by

- More of an explaining than critical approach
- Little about what to do specifically in the Swedish Armed Forces (tactics, training, materiel...).

## **6. REFLECTIONS CONCERNING THE TRANSFORMATION OF THE SWEDISH ARMED FORCES SINCE THE END OF THE COLD WAR**

The transformation in Sweden has been a process with many frictions. After twenty years there is still not a ready post Cold War defence. The main reasons for this are the following:

- A legacy of personnel, materiel, policies etc which only to a certain extent was of use. If you have a lot of resources you can throw away the part of the legacy not needed. After the end of the Cold War the defence resources decreased however. (Bergstrand 2007; Bergstrand 2010). Psychologically it is also difficult to change processes and culture which have served you well for a long time.
- Lead-times in the defence sector are long. If you change defence policy frequently and/or are unclear where you would go, things will not change. The Parliamentary Defence committees have not been very clear concerning priorities (Christiansson 2009). The reason is mainly that the reports are political compromises, depending on the fact that all parties are present; not only the parties in the Government. So priorities, although not very clear, have been shifting from long-term to near-term, from territorial defence to international operations, from buying materiel at home to buy from abroad etc. There is probably good reason for these changes but the fact remains that it makes it difficult to transform constructively.
- There has been an uncritical attitude to defence – policy buzz words. They have a lifecycle of some years. Initially the buzz words are looked upon as the salvation in a difficult situation. The Gloria is however soon fading away and not much has happened. The problems with the buzz words as with the policies are that they lack endurance. To this should be added that the buzz word were to a little extent used to prescribe in concrete terms what should be changed.
- It is difficult to get a momentum in the transformation process if you do not know where you are (S&W of today's defence to today's tasks) and where you should go (structures(s) for the future). Assessments have been lacking.

## **7. RECOMMENDATIONS**

- Try to keep alive a long term planning and study process, including alternatives, assessments by simulation and gaming..... Add to this a critical assessment of today's capabilities.

Now and then politicians and/or generals and admirals stress here and now or see “the only solution” (sometimes a three letter combination but not always). In systems with long lead times (as defence) and uncertainties concerning “the environment” you as an analyst must plead for planning and studies even if you can have an understanding for the politicians and generals/admirals. (Foghelin /UI 2007).

- Avoid trend extrapolation and wishful thinking.

Two examples from the defence area could be the nature of conflict and the security of Europe.

For a long time international operations have been the dominant task for the west. State-state war is by many considered to be outmoded (Smith 2005). It is however a dangerous assumption. For several reasons the supply to international operations can decrease (Foghelin 2008) and or state-state war can return (DCDC 2010; Gray 2005)

- There is an (natural) tendency to avoid thinking about low probability - high impact incidents (Kunreuther and Useem 2010; Sunstein 2007). Especially for defence it is important to consider these. Europe is not very keen on military conflict any more (Sheehan). This could be dangerous if the rest of the world does not share the opinion that military means (war) should not be used (Delpech 2007; Foghelin 2009). We cannot always and for ever be saved by the USA (Mahbubami 2010; Shapiro and Witney 2009)
- New ideas and concepts should be taken into account. Even if they immediately are seducing they should not be a substitute for studies (Foghelin 2005). The new ideas and concepts should be transferred to tangible solutions and then tested in several dimensions e.g. economic feasibility, technologies available, personnel friendly and last but not least effective against an enemy using asymmetric means if needed.
- To be able to transform systems with long lead times you must have endurance. New ideas every second year or so will be expensive. The effectiveness will be low.

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## **9. LIST OF ABBREVIATIONS**

AVF All Volunteer Force

CBRN Chemical, Biological, Radiological, Nuclear

EBO Effect Based Operations

FHS Swedish National Defence College

FMV Defence Materiel Administration

FOI Swedish Defence Research Agency

HHG Helsinki Headline Goal

ICT Information and Computer Technology

MSB Swedish Civil Contingencies Agency

NBF (A Swedish version of NCW)

NBG Nordic Battle Group

NCW Net Centric Warfare

RMA Revolution in Military Affairs

SF Special Forces

S & W Strength & Weakness

SU the Soviet Union

WP the Warsaw Pact

