



The Finnish Defence Forces
Annual Report 2010



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The Defence Forces are already in the process of reform

In the activities of the Defence Forces, as well as in social discussion concerning the Defence Forces in 2010, prevailing subjects have included financing, change and conscription. Financing has always been important, but now it is especially topical from the point of view of the recession of the national economy and the activities of the Defence Forces. Within public administration, the Defence Forces have been required to make savings where alongside of trimming down expenses, the aim has been to act more economically. Good results have been achieved. By acting more economically, we have been able to save approximately 15 million euros in 2010. This is an exemplary achievement, and hopefully it will motivate our personnel to take into consideration even small economical actions in their daily work also in the future.

Financing is important also because in the long run, the Defence Forces must be able to improve cost efficiency by means of internal development. The years to come will bring great changes that are partly independent of the Defence Forces. The rise in cost level in the defence sector continues. It is more rapid and has a steeper incline than the general level. Large batches of defence materiel will become outdated in coming years and conscript age groups will become smaller. Managing the effect of these changes is impossible if we do not reform the Defence Forces' structures and activities. If we continue as before, in worst case, the Defence Forces will be at a dead end at the close of the decade. Fixed costs caused by structures and activities are so large that there will not be enough money left for our

main task - maintaining the capability required for the defence of Finland. Maintaining it means ensuring the existence of willpower, skills, equipment and readiness.

Willingness to reform

The need for reform has been clearly realised and the grounds are extensively understood. This was the main subject of communications of the Defence Forces' high command in 2010. As of yet there are no solutions. The way forward will be further developed during 2011. The aim is that the inevitable phase during which personnel is uninformed of the content of the Defence Forces' reform should be as short as possible. In the autumn of 2010, I ended a round of inspections in brigade-level units, headquarters and establishments. It has been good to perceive how motivated the salaried personnel and conscripts of the Defence Forces are in their tasks. I would like to give special recognition to our civilian personnel, which represents continuity in many offices as soldiers' tasks change every few years. I hope that throughout the Defence Forces, although the content of the coming reform is not yet precise, we can still focus on our daily work as energetically as we have until now.

Certain aspects for the Defence Forces' reform have already now been put in place. Also in the future, the principle for Defence is territorial defence. General conscription and training the entire age group fit for service are the points of departure. Structures must be reformed. If we were to only thin down the current



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*Change begins
 in each of us.*

organisation, the risk would be that the workload of personnel would only grow larger. Therefore, we need to also reform courses of action and redistribute tasks at different levels. Thus, the aim is, among other things, a more even distribution of personnel workload.

The working group appointed based on the White Paper of 2009 that was tasked to determine the social effects of military service did an excellent job. The results are presented in its report published in the autumn of 2010. The Defence Forces are thoroughly investigating the

possibilities for implementing the working group's recommendations. Military service still has the strong support of Finnish citizens, although there has been some variation in the results of opinion polls.

We need unanimity. Important building materials of the Defence Forces' reform are the personnel's readiness for change, capacity for renewal and for cooperation. These are strong within the Defence Forces. We can build the future based on them.



Commander of the Finnish Defence Forces
 General

Ari Puheloinen
Ari Puheloinen

More together

On 1 January 2008, three main tasks were prescribed for the Defence Forces; the military defence of Finland, supporting other authorities and participation in international military crisis management. As we know, the military defence of Finland is based on total defence. For the Defence Forces, the fact that society's resources can if necessary also extensively be directed to a defence task means that there is a considerable need for mutual cooperation. Preparing for the most difficult situations must be done during easier times. In preparing national defence, cooperation must take place on a daily basis.

The basic nature of the other two main tasks is such that the need for cooperation is self-evident. The need for close cooperation is a central condition for the Defence Forces' cost-effectiveness. This has been seen more and more in the external activities of the Defence Forces. Internally, cooperation has been regarded as a self-evident fact already for a long time. The challenges and possibilities of the future lead the Defence Forces to intensify different forms of cooperation, both internally and externally. Within the Defence Forces, there is a strong belief that by doing more together, we also achieve more together.

In no other place than Finland

The Defence Forces can be described in many ways. In this article, cooperation is considered on the ground, at sea and in the air from the perspectives of leadership, logistics and training. Seen from all perspectives, the year 2010 was a good one. Challenging, but instructive and rewarding.

The Army's cooperation year began with the signing of a cooperation agreement with the Border Guard. Because border troops, or parts of them can be incorporated into the Defence Forces in exceptional circumstances, joint planning, development and training for such implementation is important. The cooperation with the Border Guard is a model example of how even the challenges posed by administrative boundaries can be smoothly overcome.

An excellent example of a joint exercise was carried out in the Eastern Command in October 2010. Alongside of the Defence Forces, regional authorities, the police, rescue services, emergency response centre, a university hospital, a city, vocational and adult education establishment, the regional Red Cross and Finavia took part in the exercise. This type of exercise that gathers together such a group of different actors is arranged in no other place than Finland.

Reservists have cause to be proud

In 2010, the Navy had to extend its capabilities for cooperation to the utmost. Cooperation among maritime actors, which for a long time has been arranged with good results, was adapted to the reorganisation of the maritime sector and the Finnish Transport Agency and Finnish Transport Safety Agency (TraFi). Significant progress has been achieved also in the international exchange of maritime situational awareness. The SUCBAS cooperation structure for the Baltic Sea area has reached the technological readiness to exchange entire situational awareness pictures instead of only individual pieces of situational data. Activities are expected to be started up next year, when agreement arrangements have been finalised. The Finnish Navy has also led the corresponding MARSUR project of the European Union, where the model system will soon be ready to be presented.

The Navy's participation in building and training the European Union's Nordic Battlegroup has included gaining information from the Army on lessons learned regarding both operations and readiness arrangements. The work that was begun in good time has been a success from the point of view of recruiting, among other things.

*Lieutenant General Markku Koli
Chief of Defence Command Finland*



The personnel composed of reservists is of high quality and well motivated. Finland can easily put a Navy reservist beside an experienced professional soldier from another country and Finns will have cause for nothing but pride when it comes to know how or attitude.

The new area of operations of the Navy, international crisis management, also includes significant perspectives for cooperation. Among the most important experience gained from the Northern Coasts 2010 exercise led by the Navy was the testing of a multinational command and control system. Building interoperability requires long term agreement arrangements and plenty of training. Also in the European Union's maritime operation Atalanta, the constant reliability of international command and control methods is an area that requires continual efforts.

Security and cost-efficiency in cooperation networks

Cooperation in relation to command and control systems has increased during the last few years both on a national and international scale. In order keep control of entities that are becoming more and more complicated and require solutions for interoperability, this is a necessity. Commercial implementations, an international set of norms for interoperability and sufficiently diversified system testing are essential.

The national TUVE security network project has progressed from planning to implementation. Although there is still work to be done, the secure network infrastructure will ensure that the cooperation of the nation's security actors cannot be paralysed by means of service interference attacks, which became much more common during the past year. Attention has been paid also to guaranteeing physical security and continuity, taking into consideration lessons learned from extreme natural phenomena.

International forms of cooperation for building interoperability have been established. Based on lessons learned from cooperation, the Defence Forces Concept Development and Experimentation Centre has been started up in Riihimäki. In the future, both national and international interoperability testing will be carried out mainly via the network, which will improve cost-efficiency. With this sort of arrangements in place, internal interoperability will in the future be the point of departure for all Defence Forces IT development.

Conscript networking started

Natural phenomena have coloured also the cooperation activities of the Finnish Air Force. The social effects of the ash cloud caused by the volcano eruption on Iceland were considerable. Small, but important aspects of cooperation were affected. The uniqueness of the pictures taken of the engines of a Hornet fighter aircraft received extensive international attention already in the first days of this exceptional occurrence. Air sample collection and life saving patient transportation com-

plemented cooperation during the ash crisis. Later, also aerial photography supported the leadership and planning work of other authorities in managing the serious consequences of storm damage.

An area of cooperation that perhaps concerned citizens on a broader scale was the report on the Finnish conscription system compiled by the working group led by Chairman Risto Siilasmaa. The breadth of the working group's fora for meeting and interaction was impressive and previously unheard of for one single issue. The national importance of conscription received strong support and excellent directives. Increasing interaction in all phases of conscription, from the time before call-ups to the end of the period of liability for military service was emphasised as a viewpoint offering new possibilities. Coordinating the individual possibilities and needs of conscripts with the corresponding ones of the Defence Forces is expected to result in significant benefits for both parties in the future.

Other training has also been networked. The National Defence University has established joint command post exercises, instructor exchanges, visiting professorships and joint doctoral programmes. A dialogue has been started with the Aalto University concerning the comprehensive development of national leadership education.

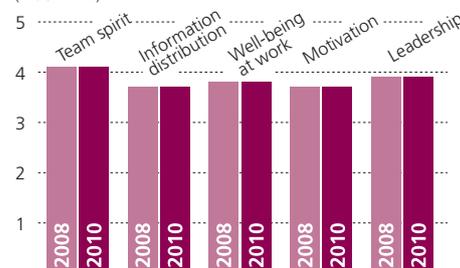
Social media opened

In the field of logistics, the Defence Forces' maintenance partnership reached its functional objectives, and in part even surpassed them. A decision has been made on new cooperation arrangements for catering services. A new company is expected to begin working at the beginning of 2012. Planning has benefited significantly from experience gained from the maintenance partnership, and here also the possibility for reaching the objectives is good. In the international field of logistics, cooperation has been established both with NAHEMA coordinating multinational helicopter projects and NAMSA supporting spare parts procurement.

In 2010, the Defence Forces also made a move towards social media. The Defence Forces' YouTube site, strategic work in social media and experiments with Twitter open up a channel for the more extensive use of new media in the Defence Forces. In Finland, national defence concerns the entire country and all citizens. The openness brought by new means of communication, interaction and gathering of experience, viewpoints and information are areas that include significant potential for added value in the future.

In Finland, national defence concerns the entire country and all citizens.

Results of the working environment analysis 2008–2010 (index 1–5)



Special strengths in the working environment within the Defence Forces are the team spirit in small groups and the satisfaction of employees with their own duties and their closest superior.

United Nordic Effort

THE NORDIC MINISTERS OF DEFENCE SIGNED A NEW COOPERATION AGREEMENT. THE RESULT IS CLOSER NORDIC DEFENCE COOPERATION.

Nordic defence cooperation received a welcome jolt of power when the Nordic Defence Ministers signed the Nordic Defence Cooperation (NORDEFECO) Agreement, which entered into force at the end of 2009. During 2010, structures for Nordic military-level cooperation were renewed to form NORDEFECO and old forms of cooperation were removed.

NORDEFECO means comprehensive cooperation between the armed forces of the Nordic countries. Its aim is to strengthen the participating countries' national defence by means of joint cost-effective Nordic solutions. Nordic cooperation in the field of defence strengthens the Finnish Defence Forces' international networking. For Finland's part, objectives were defined more closely, in order for the cooperation to also support the development of the Finnish Defence Forces' functions.

The highest military-level body is the Nordic Military Coordination Committee (MCC). Its work is supported

by a coordination staff in extended deployment in different Nordic defence command headquarters. During 2010, officer exchange was implemented between the Nordic countries. The most important areas of cooperation were, and still are, strategic development, capabilities, personnel and training, exercise activities and operations. Each area of cooperation focuses on dealing more extensively with the projects in its own sphere of activities.

Exercise activities increased

The year 2010 included functional investment in exercise activities across the borders between the Nordic countries. The Finnish Air Force repeatedly practised joint operation in the area of the Scandinavian Shield with both the Swedish and the Norwegian Air Force.

In the summer, the Finnish Navy organised the largest naval exercise ever to be arranged in Finland; the North-

VIEWPOINT

What did this give me?

"I am 26 years old. I come from Tammi-saari, and my background in the Defence Forces before the NBG (Nordic Battle Group) consists of one year as an enlisted soldier and two years of one-year service in the KFOR operation in Kosovo. My reasons for taking part in crisis management missions were an interest in national defence tasks, money and a wish to see the world and the possibility to, at least in some small way, make a difference in other people's lives.

Although I have taken part in crisis management missions twice, I can say that

this is a totally new kind of experience. The battle group concept is completely different from existing operations in the fact that anywhere you go, you have to be ready to act according to the needs in that area. It makes no difference whether there is a humanitarian, armed or other kind of conflict in that area.

As Administrative NCO of the unit's logistics section, I worked mainly as the materiel accountant's partner and deputy, but also in duties of a Sergeant First Class. The thing that became emphasised here, as in earlier tasks, was the following: Although we are all totally different people, with totally different backgrounds, we have to try to always get along with each other. Even if I happen to be totally fed

up with that other person. The fact is that every soldier's expertise is needed in order for the overall picture to stay together. This is the strength of the NBG - it contains both know how and versatile people.

Finally, I can only say that even if it feels hard sometimes, if my year in the NBG continues in the same way as it has begun, my memories of it will most likely be only good ones. This is why it is good to call to mind the motto of the European Union in the spirit of the Battlegroup - In varietate concordia (Unity in Diversity)."

STAFF SERGEANT MIKAEL BÄCKMAN
ADMINISTRATIVE NCO



Nordic cooperation was practised during among others the Northern Coasts exercise.

ern Coasts exercise in the Baltic Sea. Seventy vessels from thirteen countries took part in the exercise. The Finnish Army participated in the Cold Response exercise in northern Norway with a detachment of 300 soldiers.

From the point of view of resources used, the focal point of NORDEFECO activities was on forming the Nordic EU Battlegroup (NBG) to be on standby in 2011. The unit to be deployed to the Battlegroup, the international Amphibious Task Unit (ATU), is a unit that also has national duties in case of exceptional circumstances. Thus resources allocated for the NBG project also support the development of national defence.

The Battlegroup's Multinational Force Headquarters was established in Enköping, Sweden in September 2009, after which it has been training actively. The soldiers of the Battlegroup itself were recruited during the spring of 2010 and they began their service in May 2010 in Tammisaari. During the training phase, the unit trained first in Finland and in October and November it trained

together with the other parts of the Battlegroup in Sweden. The training phase culminated in the Joint Action exercise in southern Sweden in November 2010.

Not a defensive alliance

By participating in the development and maintenance of the EU's rapid reaction forces, the Finnish Defence Forces take part in strengthening the EU's security cooperation and bearing the joint international responsibility. NORDEFECO helps strengthen the

Defence Forces' networking and supports the development of the Defence Forces. It should be noted that despite the strong networking, a defensive alliance is not being built through NORDEFECO. Each country is responsible for the defence of its own territory also in the future.

Nordic cooperation in the field of defence strengthens the Finnish Defence Forces' international networking.

Military service is part of all Finnish people's lives



OFTEN, WHEN THINKING ABOUT MILITARY SERVICE, MOST PEOPLE ONLY REMEMBER CONSCRIPTION AND THE OCCASIONAL REFRESHER EXERCISE. HOWEVER, MILITARY SERVICE PRODUCES A LOT MORE THAT AFFECTS THE EVERYDAY LIVES OF FINNISH PEOPLE.

Military service is a cost-effective means for organising the military defence of Finland. Its most important task is producing war time forces, which ensure both the prevention and repelling of crises. Our main objective is to prevent crises from spreading to Finland. If we fail in this, the defence system is capable of ultimately repelling an attack aimed at Finland by using the resources of the whole society.

In the autumn of 2010 the extensive report of the working group on conscription led by Risto Siilasmaa was published. The clear conclusion of the report was that military service is the only realistic alternative for producing the necessary defence capability for Finland in the foreseeable future. Military service has a long tradition in Finland and each person has their own opinion of it. Every year, more than 23,000 conscripts carry out their military service, and an even larger number annually take part in refresher training.

Military service is quite concretely a part of all Finnish people's lives.

VIEWPOINT

A young soldier's purgatory

"When I started my military service in January 2010, as many of my comrades, I was a young man of 19 years who had just finished secondary school and didn't really know what to expect of the coming ordeal. The coldest winter in sixty years and the stories my cousin (a sergeant in the reserve) told about his own military service made me nervous.

Carrying a laundry bag with frozen fingers, I remember thinking, what have I gotten myself into? Being nervous turned out to be unnecessary, however, because as the NCOs kept telling us – "this ain't no rocket science". Even the physical side wasn't so bad, since I had been smart enough to stay in shape before military service. Actually, I think the worst part, in the beginning and even now, was having to lose my beard and keep shaving all the time. Luckily you can get used to almost anything, even beardlessness..."

Clear plans

"Already in the beginning I had clear plans

It is important to make good use of know how

From society's point of view it is important that the Defence Forces are able to make use of the know how that conscripts have acquired in civilian life, and on the other hand, society in turn benefits from the know how

acquired during military service. This know how can be used already under normal circumstances in the task of supporting other authorities. The conscription system also produces a broad base for recruiting and skilled personnel for international crisis management tasks.

In addition to defence capability, military service also produces many positive by-products for society. These

for my service career: first I was going to be a military police in the Second Jaeger Company, then the military police branch at the NCO School and from there possibly on to the Reserve Officer School. I was accepted as a trainee in the Company I had wanted. My basic training phase went well enough for me to get into the NCO School and even onto the right branch. While I was in the NCO School, my plans became clear and I knew I wanted to go back and be a squad leader in my basic training unit. I got lucky and was accepted to the place I wanted.

Leading the conscripts of one's own contingent is challenging, but perhaps also more interesting than training new recruits. In the Second Jaeger Company, this became clear to me through among other things varied camps, certain practical military police exercises and other kinds of interesting training, such as abseiling for example.

My leadership period in the Second Jaeger Company was absolutely the best time during military service. It suited me well not to have to go over the basics hundreds of times, but rather to be able to get right to the point – in other words

Military service has a long tradition in Finland and each person has their own opinion of it.

leading a military police squad in all kinds of different situations."

What did I take home?

"I think that military service has been a lot of use to me. Already during basic training I learned the meaning of cooperation. While putting together half-platoon tents, I realized that without good cooperation and team spirit you can't really get anything done.

The leadership training I received has given me valuable experience relating to leadership that people don't usually get at such a young age. I also think that the unique military police training will be of use to me in the future. Especially as I plan to apply to study at the Police College. During military service I also took a course offered by the Regiment, which authorizes me to work as a security guard in civilian life.

As a whole, military service has taught me how to get along with all kinds of people. The Defence Forces really form a cross section of my age group, both in a good and a bad sense. For the most part however, it is absolutely in a good sense.

CORPORAL OSKARI ANTONEN

For many, driver training during military service leads to a future profession.

include among other things an effect on national health, mainly in terms of physical fitness, control of excess weight and prevention of illnesses. By creating a common foundation for values and experience in young people, conscription also increases the will to defend the county. General conscription prevents exclusion among young people and supports the integration of immigrants. Saving one young person in danger of becoming excluded saves society almost a million euros, not to mention the benefit for the individual himself.

From the point of view of the individual, the useful skills learned and the experience gained during military service are significant. Last year, most Finnish drivers of

heavy vehicles got their licence during military service. The first aid training given during military service makes the Defence Forces the second largest first aid instructor after the Finnish Red Cross. Many of the other skills learned are also useful to the individual. These are for example leadership skill, the ability to interact with others and to act as part of a group.

From the point of view of society, conscription is a basic requirement for producing Finland's defence capability. From the point of view of the individual, it is an educative and useful experience that one would hope that as many as possible Finnish men and women volunteers would be able to enjoy also in the future.

VIEWPOINT

Network defence in the reserve and civilian life

"In a unique way, the Finnish military service system is able to make use of the know how of the Finnish people. As a result of the reservist system and as experts in their own fields, citizens bring with them their own special skills for the use of society. In order for this to work, it is especially important that men and women are placed in tasks corresponding with their capabilities. I carried out my military service in the Signal Regiment in Riihimäki. After that I have been working with information network security and the prevention of network criminality my whole life. In other words it is natural that I do work relating to my field also in the reserve.

The Finnish system is often surprising to my foreign colleagues. I often tell them: "When I go back to the army, they don't give me a gun. They give me a keyboard" and that is the end of the discussion. Although I see many different things in my work, some of the most interesting sessions have been in refresher exercises. There are very few organizations where it is possible to test network security as extensively as in the Defence Forces.

Through my job I am often in contact with the armed forces of other countries and sometimes with foreign intelligence or-

ganizations. This can lead to interesting situations.

I remember one time, when I was invited to give a presentation at the NSA (National Security Agency) headquarters in Fort Meade in the US. This sounded like a once in a lifetime opportunity, so I accepted the invitation. Because this was the intelligence agency of a foreign state, I informed my superior in the reserve beforehand. He thanked me for the information and promised to find someone who had been to the NSA before, who could give me some background information for my visit. In the end he got back to me and said "there is not one person to be found who has ever been there before." So we did it the other way around and after my visit, I went down to give some background information for future visits.

Another interesting situation took place at the annual conference of the NATO Cooperative Cyber Defence Centre of Excellence in Tallinn. After my own address I was listening to Researcher Charlie Miller's lecture on cyber attacks against the US. Charlie's lecture was very detailed: what kind of organization he would build, what its structure would be, annual budget, mode of action, and so on.

His thorough presentation also included how his unit would be able to break into systems that were not connected to public networks, or how the attack would continue against the country in question even

if it were to disconnect itself from the Internet. After the lectures a reporter came up to interview Charlie and myself. He asked both of us to ask the other a question. Charlie asked me how I would protect the country from an attack such as he had presented. I thought about my answer for a long time, because there was no simple solution against his attack model. Finally, I stated that because the attack was so complicated, the best form of defence would be to locate the leadership of the operation and eliminate it. In other words to assassinate Charlie. I don't think this was the answer he was expecting...

Over the years, network centric threats have changed many times and today's society is even more dependent on information systems and networks. This is why it is important for the Defence Forces to stay up-to-date and make as much use as possible of the know how of the reserve. After my military service, I applied to the National Defence University. I didn't get in. Now and then I have wondered what kind of work I would be doing now, if at the time a military career had been in the cards. But even if the doors of the Military Academy didn't open for me, thanks to our reservist system my skills are at the disposal of my country if at some point in time they are needed."

FIRST LIEUTENANT IN THE RESERVE
MIKKO HYPÖNEN
WORKS AS CHIEF RESEARCH OFFICER
AT F-SECURE

The Garrison needs the municipality and its inhabitants

The Pori Brigade in Säkylä is one of the Army's three readiness formations. Approximately 2,350 conscripts began their military service at the Pori Brigade in 2010. Of them, more than 200 will also be trained in rapid deployment training for readiness to take part in demanding crisis management duties.

From the point of view of the conscript and society, conscript training produces more than just a skilled reserve. Concrete examples of this are leadership and driver training. Of the conscripts serving at the Pori Brigade in 2010, 785 were selected for leadership training and 494 underwent driver training and took the professional drivers' examination.

Despite the longer service period of twelve months, a sufficient number are willing to take part in the training. During military service conscripts also learn how to function as part of a group. This increases social skills and the understanding of the importance of a common set of rules.

Training for wartime duties is mainly carried out as planned and implemented by the basic units of the garrison. The main part of the rest of the Brigade supports this most important peacetime activity.

Training is carried out in a motivating way and moves upwards from smaller pieces towards larger entities. The high expectations of young people today concerning training events are met with for example better planning of training events and different simulator systems. The greatest challenges lie in the number of instructor staff needed for training in small groups

and a sufficient amount of training material to enliven the training.

To support its activities the garrison needs unreserved and functioning connections with the surrounding society. The Pori Brigade truly feels that it is a close part of both Säkylä and the province around it. Matters are prepared together and both parties listen to each other's views and take them into consideration in their activities. This has enabled the formation of the good training conditions that now exist.

The area's inhabitants are also happy to join in the crisis management exercise held each spring around the market place, and numerous sporting facilities and events are managed together with the municipality and its inhabitants.

COLONEL EERO PYÖTSIÄ,
THE PORI BRIGADE

VIEWPOINT

An older combatant in military service

"You can probably never prepare enough for a change in your life, even if you know about it in advance. As an technology entrepreneur, I had postponed my military service all the way until the age of 28. From one year to the next, I felt that the company and staff would not necessarily manage without my presence. In the last six months I had been concentrating full-time on sales and customer deliveries and had even managed to reach record results. I joked with my colleagues who sometimes worried about me that during military service I would have time to sleep, if not before.

Ahead of me, starting in July 2010, I had an adventure that would last at least six months. I have worked as an entrepreneur since I was sixteen years old, acting as a consultant to the government, public sector and important businesses. Now, for the first time I would be working entirely for someone else. And this someone else would be none other than my beloved country.

Bus number 86 to Santahamina. This was a route I would come to take many times. My future comrades all quietly staring out the window. By the look of them, all between the ages of 19 and 22. I thought about how different this would have been if I had entered service right after finishing secondary school.

That day I went from one checkpoint to the next as if on a conveyor belt, until I finally met the guys who would be my room mates in the barracks during the basic training period. Thinking about it later on, it was lucky that I ended up in the same barrack room as these guys. Despite the fact that we all had different backgrounds and were from different parts of the city, our team spirit was great and the conversations profound and interesting.

I learned a lot from them about the way young people think and about the trends nowadays. They in turn learned about ideas concerning for example entrepreneurship, principles for succeeding in life and about learning that my experiences had brought me. They often made suggestions to me about things they wanted to know more about. I would open my thoughts

during evening formation and roll call before going to sleep.

Mentally, one of the most interesting events was the experience of unification. Your own style, from the way you dress, to how you walk and talk - everything is retrained into a new uniformed mode. We would go to eat in formation with our backs straight. We would stand at attention. We would sit upright on our chairs. Our uniforms would be just right and identical. In the morning our beds would have the same neat appearance. These changes seemed to be a challenge for some who had just passed adolescence, and who perhaps had only just found their own way of expressing their individuality.

I understood quite quickly the importance of the systematics and accuracy from the point of view of the wartime crisis organisation. When in an urgent situation, you don't have time to worry about who is where and who doesn't have this or that piece of equipment. Routines form a sound base for activities."

PRIVATE FIRST CLASS TEEMU ARIMA

The procurement of command and control systems is a long-term process

LAST YEAR, SIGNIFICANT PROGRESS WAS MADE IN THE DEVELOPMENT OF THE DEFENCE FORCES' COMMAND AND CONTROL AS WELL AS IN THE INTRODUCTION OF SYSTEMS AND BUILDING OF COMPLEX SYSTEMS.

The introduction of information systems is seen in the growth of efficiency and productivity as well as in cost-savings. The achievement of these is challenged by diverse requirements set for the Defence Forces, such as personnel reductions in accordance with the productivity programme, the rationalisation needs of service production and the intense centralisation of functions. The objective is to meet these challenges with long-term development projects, of which parts were introduced in 2010.

Taken as a whole, the operational command and control of the Defence Forces has been a subject of development during the entire 2000s. The aim has been to build an integrated system for intelligence, control and leadership that is up-to-date and that meets the requirements of both a network-assisted territorial defence system and peacetime activities. Development is progressing to the implementation phase, the aim being a system that can be enlarged in the span of a few days to create a combat efficient entity that is maintained by reservists and that covers the entire country.

The new technological base for the Defence Forces' operational system was put into productional use in the summer of 2010. Thus a transfer was made from using several SAP systems to one joint Defence Forces SAP system (PVSAP). The use of network tools that will be found on every employee's desktop will progress in phases. In this so-called burn-in phase the greatest challenge lies in changing established practices and

developing know-how. This challenge is expected to be overcome by means of effective steering and training.

The development of the network-assisted regional defence system includes networking together complex systems in order for them to be able to make use of each other's services and support each other. In addition, there is a special interdependency between these systems situated at the core of the defence system that requires special knowledge and maintenance skills. In order to enable this development, the Defence Forces are in the process of defining a joint capabilities concept model for the entire defence system. The Defence Forces' operational system for requirements management and project steering will be supplemented to include coordination between extensive complex development programmes. This presupposes that architectural steering is reformed and extended to include the entire defence system, that functional concepts are drawn up and that a capability-based mode of action along with requirements management to support it are developed. The success of development also presupposes a new kind of know-how both in leading projects and in procurement itself.

ICT is by far the most problematic from the point of view of procurement!

From the point of view of the Defence Forces, the success of development work presupposes the comprehensive management of the supplier network so that the strategic objectives of the Defence Forces can be extended better and farther beyond traditional commercial agreements. The point of departure for development is thus highly challenging because, at the same time, the market for military systems has become sig-

nificantly more narrow. Service suppliers are competing for an ever smaller market segment in the field of ICT. Development work has halted in part and in part been strongly centralised. Also the needs and requirements of the buyer have changed considerably during the last few decades. The emphasis of basic structures and demands in the development of command and control systems of the countries concentrating on crisis management is on responding to asymmetrical threats, operations outside of the home country and on requirements for interoperability at combat technical level. These requirements steer both product development and the development of technology. The result of this is, among other things, that the direction of the technological and functional development of commercial off-the-shelf (COTS) products is partly contrary to the traditional requirements of the national defence of Finland.

Defence Forces procurement is divided into two main groups according to procurement objective. From the point of view of the capability of the Defence Forces, and in euros, the largest group is defence procurement, which includes goods or services that are specifically designated for military use. The largest group, measured in amount of procurement, is civilian procurement, which includes all other goods and services. Procurement of ICT is included in both groups.

The European Union has made public two important directives regulating public procurement that affect the Defence Forces' procurement activities significantly. Regarding these European Union directives, national legislation relating to the directive on defence and security procurement will enter into force in 2011 and the directive concerning legal redress for public procurement has already been validated on 1 June 2010 with an act on public procurement.

The new procurement legislation, which is very detailed and complicated, will significantly increase the number of procurement-related appeals in the Market Court. The number of legal proceedings relating to public procurement in the Market Court have increased each year and the trend is the same throughout public administration. This situation is not expected to change. The Defence Forces incur costs directly in the form of court costs and especially in cases where the court prohibits the procurement unit from entering into procurement contracts during the proceedings. A supplier that has won a bidding competition must prepare for not being able to realise the procurement contract dur-

ing the proceedings, which may last from a matter of months to up to two years.

Using structures and technicians from the business world is not and will not be easy, if the Defence Forces do not change internal processes and modes of action in a significant way. The change will not necessarily raise the military performance capability or support the realisation of the main tasks, even if the steering of operations were to become more effective. As a customer, the Defence Forces must be economical as well as skilled and demanding. Especially knowledge of the basic logics and structures of the ICT ecosystem and conclusions to be drawn from them as well as the analysis of resulting effects has become all the more important. Licence costs, system and application up-dates as well as development relating to maintenance and maintenance during the production itself have become factors that are more important than the procurement cost of the new system. A skilled customer knows how to use his resources so that both his own and the supplier network's value chain will benefit.

The importance of managing (steering) external resources and understanding this importance are essential in today's networked world. The skilled management of procurement ensures that external resources are led with a good knowledge of the supplier network and market area, with high expertise in procurement, good negotiation skills and know-how in drawing up contracts as well as with transparent and honest communication. The solution in situations where procurement activities become more complicated and there is a significant increase in legal regulation has been and still is the effective centralisation, steering and leading of the Defence Forces' procurement organisation and procurement activities. Procurement activities have been centralised by decreasing the number of defence procurement units and increasing units responsible for procurement to coordinate procurement according to product group. Whether the level of know-how has risen adequately will be evaluated in connection with planning relating to the reform of the Defence Forces.

In order to fully use the new technology, it is necessary to change established practices and increase know how.

Air Force tested by ash and forest destruction

A CENTRAL ASPECT IN THE EXECUTIVE ASSISTANCE CARRIED OUT BY THE AIR FORCE IS THAT THE SERVICE'S CAPABILITIES AND RESOURCES ARE ACTIVELY OFFERED FOR THE USE OF OTHER AUTHORITIES AND FINNISH SOCIETY IF THE SITUATION DEMANDS IT. COOPERATION IS ALSO PRACTISED REGULARLY.

Every year, the Air Force receives approximately one hundred requests for executive assistance and other supporting tasks. Cooperation with other authorities is carried out in search and rescue activities, territorial surveillance, assistance in flight accident investigation, air transport and clearing activities, among others. In addition to this the Air Force puts together and equips executive assistance detachments and assists regional rescue services with military fire fighting equipment and personnel.

Usually, assistance from the Air Force requested by other authorities includes executive assistance detachments and experts in clearing explosives, but in 2010 exceptional natural phenomena gave rise to a need for capabilities that are less frequently requested.

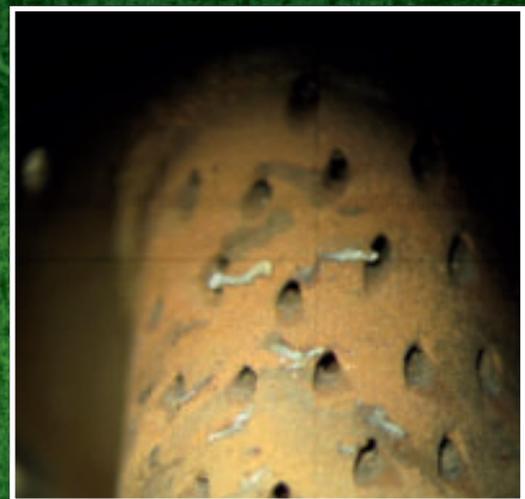
Examination and transportation during the ash crisis

First the ability to react of Finnish authority cooperation was tested by the ash crisis that touched all of Europe. The violent eruption of the Eyjafjallajökull volcano on Iceland that began with full force on April 14th spewed volcanic ash into the upper layers of the airspace. One concern was that the ash might pose a threat to air traffic safety by damaging aircraft engines.

The effects of the eruption were seen in Finland already the next

day when ash was found on the outer surface of Hornet fighters of the Lapland Air Command after a training flight in what was still supposed to be clean airspace. The Air Force had the engines of the aircraft that were subjected to the effects of the ash examined and made public the fiberoscope images showing the ash accumulation. Soon expert's reports of the Air Force's representatives on the effects of the ash on aircraft spread all over the world.

After forecasts showed that volcanic ash would drift into Finnish airspace, immediate executive assistance was requested of the Air Force in order to determine the actual ash concentration of the air mass. The Air Force ordered two of the Air Force Academy's Hawk jet trainers equipped with air sample containers meant for warfare agent reconnaissance into sampling duty at the Pirkkala airbase.



Photographs of the damage caused by the ash cloud spread quickly throughout the media worldwide.

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The Air Force took a total of 950 aerial photographs on eight flights, which covered a forest area of over four million hectares.

Four sampling flights were carried out in the direction of southern Finland and the particle concentration data they gathered was analysed by the Defence Forces Technical Research Centre. The objective of the flights was to determine whether the airspace that according to forecasts was estimated to be clean really was free of ash.

Already on the evening of the first day of flight restrictions, the data produced was available to support decision-making concerning the regulation of air traffic. The data also helped the Finnish Meteorological Institute to adjust their forecast models on the dispersion of emissions from the eruption.

During the ash crisis, restrictions to civilian aviation hindered the normal functions of society in many ways. While the restrictions were in force, the Air Force transported a transplant organ from Rovaniemi to Helsinki upon request by the National Institute for Health and Welfare. Under normal circumstances, organ transplant transfer is carried out using either regular flights or civilian operated charter flights.

Summer storms were another test

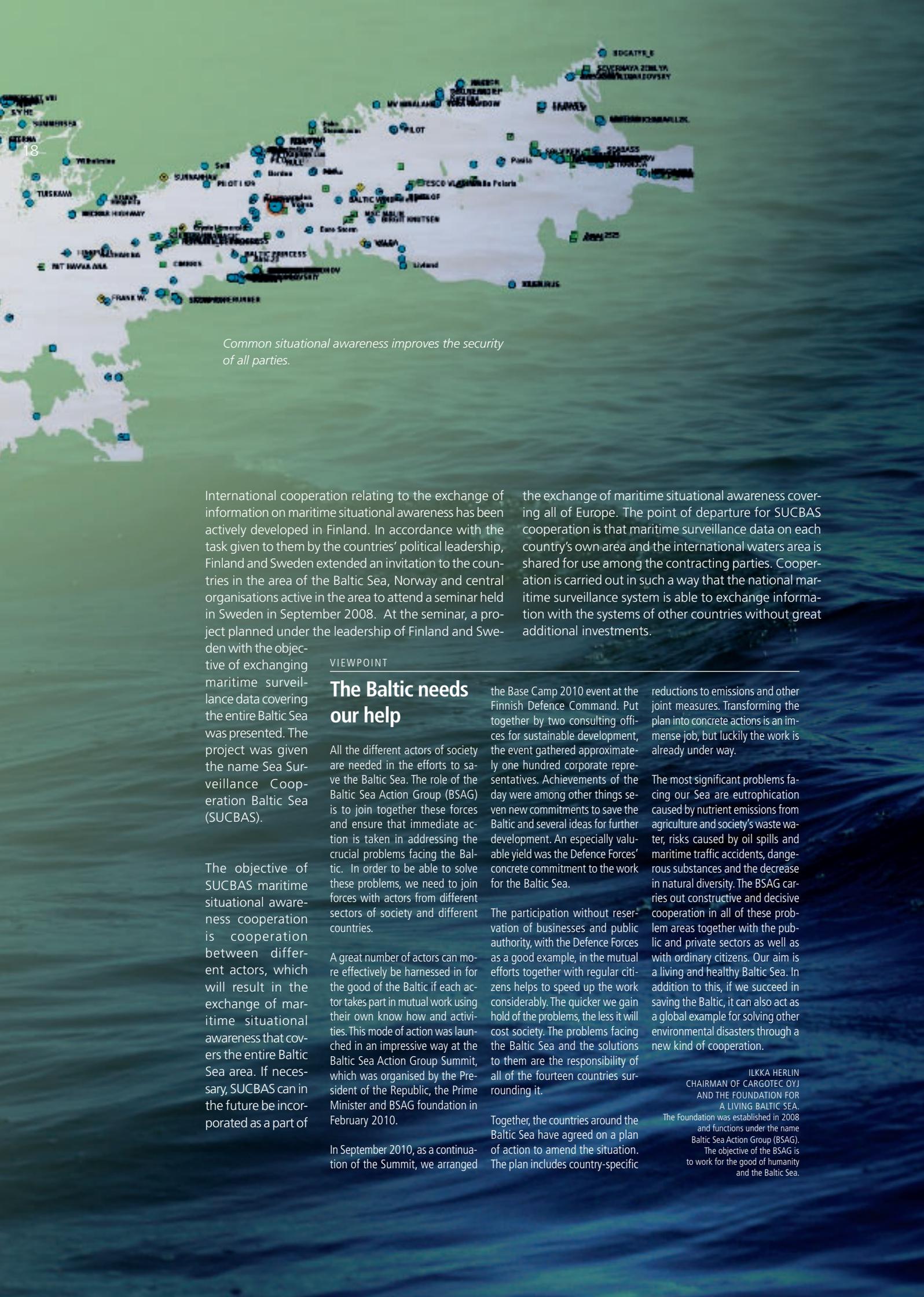
The second time in 2010 that the Air Force supported other authorities more extensively was at the turn of the month in July-August in charting the extent of forest damage caused by the thunder storms Asta and Veera. At the beginning of August, the Ministry of Agriculture

and Forestry requested the help of the Defence Forces in estimating the extent of the storm damage. The Air Force supported this work on aerial photography flights carried out by the Air Force Academy.

During August and September, the Air Force took a total of 950 aerial photographs on eight flights, which to the exactness of a tree trunk covered a forest area of over four million hectares in five provinces. The material was delivered to the Ministry of Agriculture and Forestry and to the regional forestry centres who used it for establishing the extent of the storm damages and determining focal areas as well as planning further measures, among other things.

In Finnish conditions, the air sampling capability of the Hawk aircraft and the possibility for using Learjet aircraft to photograph large land areas very quickly are unique capabilities offered by the Air Force.

The Air Force is continually developing its cooperation with other authorities. In June the Air Force signed an agreement on cooperation during disturbances to normal circumstances and exceptional circumstances with the Finnish Transport Safety Agency, which began its activities at the beginning of 2010. The best modes of action brought forward immediately by the ash crisis were taken into consideration in the agreement. Thus, assistance needed in individual crises carries through to cooperation also in the longer term.



Common situational awareness improves the security of all parties.

International cooperation relating to the exchange of information on maritime situational awareness has been actively developed in Finland. In accordance with the task given to them by the countries' political leadership, Finland and Sweden extended an invitation to the countries in the area of the Baltic Sea, Norway and central organisations active in the area to attend a seminar held in Sweden in September 2008. At the seminar, a project planned under the leadership of Finland and Sweden with the objective of exchanging maritime surveillance data covering the entire Baltic Sea was presented. The project was given the name Sea Surveillance Cooperation Baltic Sea (SUCBAS).

The objective of SUCBAS maritime situational awareness cooperation is cooperation between different actors, which will result in the exchange of maritime situational awareness that covers the entire Baltic Sea area. If necessary, SUCBAS can in the future be incorporated as a part of

the exchange of maritime situational awareness covering all of Europe. The point of departure for SUCBAS cooperation is that maritime surveillance data on each country's own area and the international waters area is shared for use among the contracting parties. Cooperation is carried out in such a way that the national maritime surveillance system is able to exchange information with the systems of other countries without great additional investments.

VIEWPOINT

The Baltic needs our help

All the different actors of society are needed in the efforts to save the Baltic Sea. The role of the Baltic Sea Action Group (BSAG) is to join together these forces and ensure that immediate action is taken in addressing the crucial problems facing the Baltic. In order to be able to solve these problems, we need to join forces with actors from different sectors of society and different countries.

A great number of actors can more effectively be harnessed in for the good of the Baltic if each actor takes part in mutual work using their own know how and activities. This mode of action was launched in an impressive way at the Baltic Sea Action Group Summit, which was organised by the President of the Republic, the Prime Minister and BSAG foundation in February 2010.

In September 2010, as a continuation of the Summit, we arranged

the Base Camp 2010 event at the Finnish Defence Command. Put together by two consulting offices for sustainable development, the event gathered approximately one hundred corporate representatives. Achievements of the day were among other things seven new commitments to save the Baltic and several ideas for further development. An especially valuable yield was the Defence Forces' concrete commitment to the work for the Baltic Sea.

The participation without reservation of businesses and public authority, with the Defence Forces as a good example, in the mutual efforts together with regular citizens helps to speed up the work considerably. The quicker we gain hold of the problems, the less it will cost society. The problems facing the Baltic Sea and the solutions to them are the responsibility of all of the fourteen countries surrounding it.

Together, the countries around the Baltic Sea have agreed on a plan of action to amend the situation. The plan includes country-specific

reductions to emissions and other joint measures. Transforming the plan into concrete actions is an immense job, but luckily the work is already under way.

The most significant problems facing our Sea are eutrophication caused by nutrient emissions from agriculture and society's waste water, risks caused by oil spills and maritime traffic accidents, dangerous substances and the decrease in natural diversity. The BSAG carries out constructive and decisive cooperation in all of these problem areas together with the public and private sectors as well as with ordinary citizens. Our aim is a living and healthy Baltic Sea. In addition to this, if we succeed in saving the Baltic, it can also act as a global example for solving other environmental disasters through a new kind of cooperation.

ILKKA HERLIN
CHAIRMAN OF CARGOTEC OYJ
AND THE FOUNDATION FOR
A LIVING BALTIC SEA.
The Foundation was established in 2008
and functions under the name
Baltic Sea Action Group (BSAG).
The objective of the BSAG is
to work for the good of humanity
and the Baltic Sea.

Common maritime situational awareness at sea

EVERY YEAR, THE NAVY TAKES PART IN INTERNATIONAL EXERCISES. INTERNATIONAL COOPERATION IN EXCHANGING MARITIME SITUATIONAL AWARENESS DATA IS A NOVELTY.

International maritime situational awareness projects promote national interests and possibilities for functioning in a changing operational environment as well as increase maritime traffic safety. Situational awareness cooperation strengthens national crisis management capability and creates prerequisites for international exercise activities.

Exercises in environmental protection are a growing trend

The Finnish Navy actively took part in exercise activities in the Baltic Sea area. Exercise activities focused on training in shallow and narrow water areas. Several international exercises are carried out in the Baltic, where the organising responsibility is either fixed or the host nation changes. One significant exercise in the Baltic Sea is the BALTOPS exercise led by the USA. This exercise is carried out annually in June in the Baltic Sea area and it ends in midsummer week in Kiel in Germany. The countries in the Baltic Sea area, and in recent years to a varied extent also Russia, take part in the exercise.

The Northern Coasts (NOCO) exercise is an extensive invitation-based exercise in maritime crisis management for NATO and EU countries. The owner of the exercise concept is Germany. The aim is to vary the area of operation of the exercise and the country responsible for its implementation. In 2010, the Finnish Navy led the NOCO exercise. The number of exercise troops and units has increased in recent years. Tens of vessel units have taken part and participating troops number approximately 4,000 persons.

Overall, the NOCO 10 Exercise led by the Finnish Navy was a very successful exercise that helped to develop the capabilities of the Navy. Experience gained from the exercise can be put to good use in developing the

Navy's national and international activities.

The most important experiences gained from the exercise were learning the international planning process of an exercise lasting approximately one year. Functioning as the command HQ of a large international exercise, with emphasis on practicing HQ composition, modes of action, giving of orders and reporting was significant. Units in the area of operation gained practice in functioning as a part of a multinational formation in a versatile and challenging crisis management scenario at sea, on land and in the air.

Exercises focusing on environmental protection and oil spill prevention and response have been a growing trend. These exercises have been carried out together with all of the countries in the Baltic Sea area. Also Russia has taken part in exercises.

Especially with the Baltic countries, cooperation has been intensive in relation to mine counter-measures and searching for old underwater explosives. Exercises have been arranged annually where also countries from outside of the Baltic area have taken part.

Naval visits that help develop and deepen cooperation have been arranged regularly among the Baltic Sea countries. The annual sea cadet days are an important link in deepening the cooperation and developing the relations between Nordic naval seamen. Events such as the cadet days and international cooperation form an important basis for naval crisis management capabilities. We continue to reap the benefits of cooperation in the form of experience and know how.

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Exercises focusing on environmental protection and oil spill prevention and response have been a growing trend.

Finland acts and learns out in the world

INTERNATIONAL CRISIS MANAGEMENT OPERATIONS INCREASE AND RISKS GROW
WHILE RESOURCES DECREASE.



In 2010, Finland took part in eight military crisis management operations and two military observer missions. The focal point of activities was in the ISAF Operation in Afghanistan. Approximately 350 Finnish peacekeepers were serving in crisis management operations at the end of 2010. The budget allocated for crisis management was approximately 120 million euros.

In 2010, several significant changes were made to the crisis management organization. The UN peacekeeping mission in the Central African Republic and Chad ended. Finland repatriated approximately 80 peacekeepers from the mission at the beginning of June.

The overall situation in Kosovo has been quite calm for a long time. The number of Finnish troops in the Kosovo KFOR Operation was decreased and the Finnish-led Multinational Battle Group Centre was incorporated into Multinational Battle Group East led by the US. The main part of the Finnish crisis management force in Kosovo was repatriated and at the beginning of 2011 only a maximum number of 50 Finnish soldiers serve in the operation.

In 2010, six Finnish soldiers served in the European Union's Operation Althea in Bosnia and Herzegovina and there are plans to increase this number with two to three positions in training and leadership. Since April, Finland has taken part in the new EU Training Mission Somalia in Uganda with four persons. In December 2010, the Cabinet Committee on Foreign and Security Policy instructed the Defence Forces to start preparations for participation in the UNIFIL peacekeeping mission in Lebanon in the second half of 2011.

Naval operation is a new conquest

In the challenging ISAF Operation in Afghanistan, Finland continued its close cooperation in the provincial reconstruction team of Mazar-e-Sharif. However, the nature of the participation was changed in such a way that the main part of the small military observer teams were relinquished and it was decided to replace these with a jaeger unit in the 2011 spring rotation, which is better suited for cooperation with the Afghan security authorities. The number of personnel in the operation in Afghanistan neared the maximum strength of 195 peacekeepers set for it by the politicians.

Off the coast of Somalia, the international community continued its activities aiming to secure maritime transports. In 2010, the Finnish Defence Forces started preparations for sending a naval vessel to take part in the EU's Atalanta naval operation in the Indian Ocean at the beginning of 2011. In addition to this, Finland will also participate in the six-month standby period of two European Union Battlegroups in the first half of 2011.

*Crisis management
is continuously becoming
more diversified and challenging.*

The training of a total of 300 soldiers was carried out within the Finnish Army and Navy last year.

Operations expand and become more difficult

Crisis management operations have become more challenging and comprehensive than before. Responsibility is more often shared among several actors. UN cooperation with the EU and NATO in Afghanistan and Kosovo is an example of this.

At the same time the amount of resources for the growing demand is declining. There is a lack of both military resources and civil crisis management experts. In addition to this, the casualties and injuries incurred in the line of service require an update to the peacekeepers' protection and insurance coverage.

The fact that crisis management personnel are volunteers guarantees high motivation for service and is therefore one of the strengths of the process for assembling Finnish crisis management troops. However, changes to the crisis management forces' procedures due to international political demands, still have to be adjusted to a sufficient amount of time for preparation and training for the troops at national level.

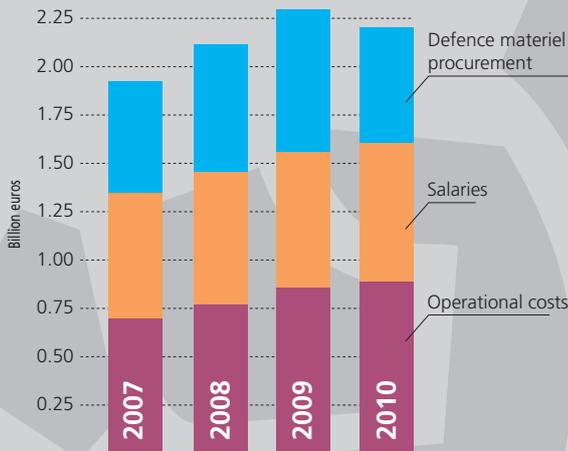
The Finnish Defence Forces' concept for military crisis management was approved in 2009. The concept is a guiding document and states the statutory task of the Defence Forces – participating in international military crisis management. Last year we reached the implementation phase and among other things the troops belonging to the crisis management force register were determined.

The troop register includes units from all services. The training and possible use of these troops in crisis management operations of the international community also serves the purpose of developing our capabilities for national defence. However, a possible decision to use the aforementioned units is always a political one and considered on a case-by-case basis.

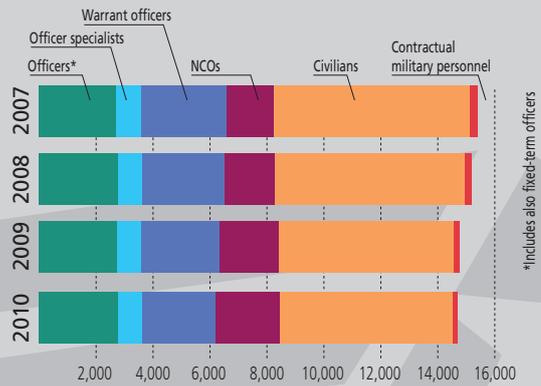
The Defence Forces participate in international crisis management operations as ordered by the government leadership. We have always been able to put the experience gained in the international arena to good use also nationally. Our activities in crisis management operations have strengthened the good reputation of the Finnish Defence Forces among the soldiers of other countries. Operational and tactical lessons learned in international operations are used in the development of national activities – now and in the future.

*We have always been able
to put the experience gained
in the international arena to
good use also nationally.*

Operational costs and defence materiel procurement



Person years

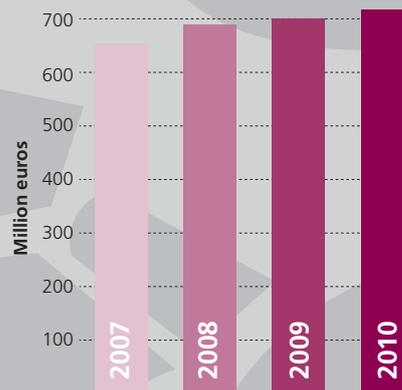


The number of person years has been reduced in accordance with the obligations set in the Government's productivity programme. The number of personnel employed using operational costs in 2010 was approximately 14,700 person years. When the person years used for persons employed using employment funding and those retiring during the interim period relating to Millog Oy as well as for the promotion of network security, the total amount rises to over 14,800 person years.

Key figures

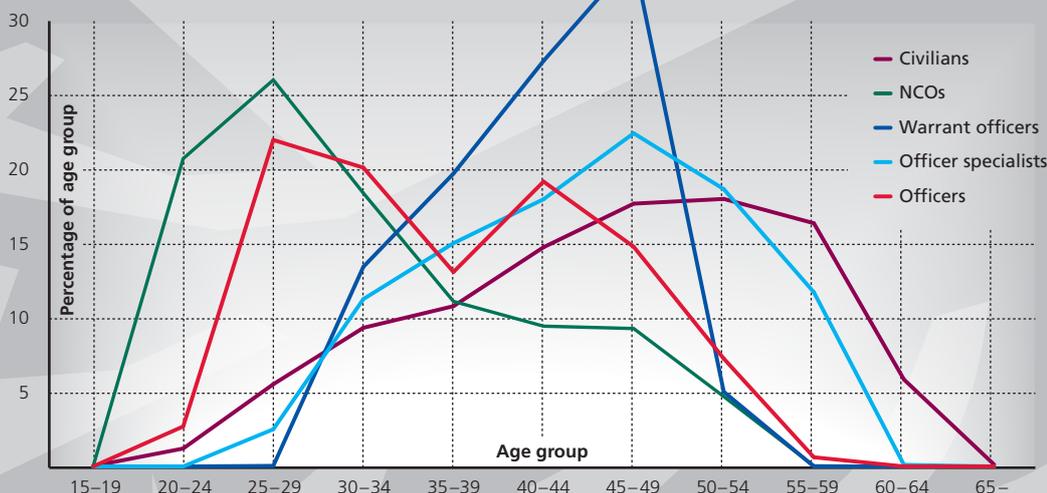
	2009	2010
Number of days in the terrain of conscripts	40	30
Number of refresher training days	132,843	105,767
Flight hours (Hornet)	9275	8870
Flight hours (Hawk)	4532	3518
Helicopter hours	2828	2272
Vessel hours	1617	1254

Salaries and other personnel expenditure



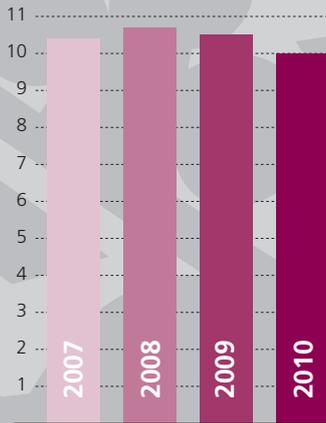
Despite the reduction in person years, the actual total of salaries grew again to over 700 million euros. This was due to salary increases based on collective agreements as well as the development of the personnel structure.

Age structure of personnel groups



In 2010, the average age of Defence Forces' personnel was 40.7 years. The age structure varies considerably according to personnel group. The age structure of civilians is more accentuated in the older age groups than the age structure of military personnel.

Sickness absences



During the last few years, the annual number of sickness absences in the Defence Forces has been approximately 10 days per person year.

Number of persons in crisis management service

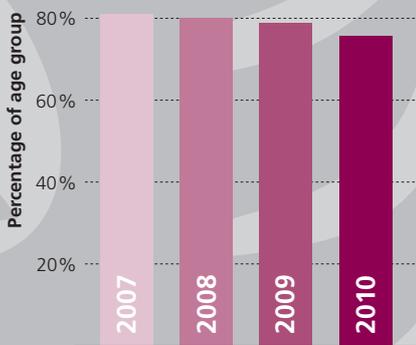
	2008	2009	2010
Kosovo	421	401	214
Bosnia and Herzegovina	52	22	5
Afghanistan	104	144	154
Sudan	1	1	2
Liberia	2	2	2
Tchad	58	74	35
Atalanta	0	3	3
Military Observers	24	20	19
Total	662	667	437

These figures are annual report figures and they are based on an annual average.

In addition, EU Battle Groups have been in training or on standby at home as follows:

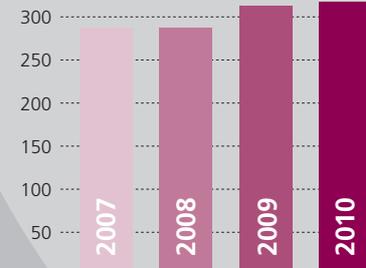
EU Battle Groups	2008	2009	2010
	111	3	300

Completed military service



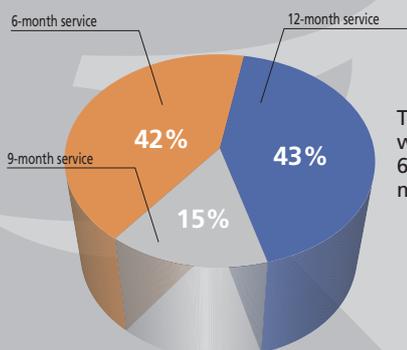
In the age group of men who have turned 30, more than 80 percent have completed their military service in recent years. This is sufficient for troop production.

Number of women



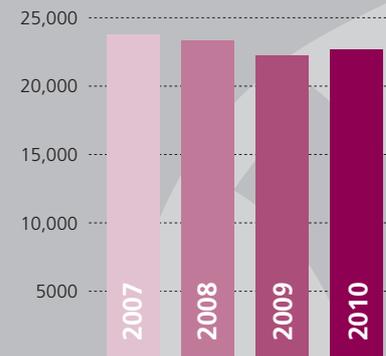
The number of women in voluntary military service has stabilized at approximately 300.

Division of service length



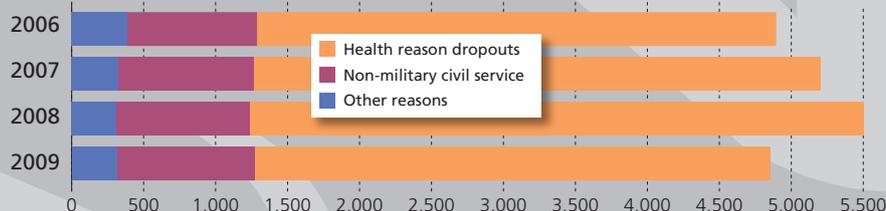
The share of those who served for 12 and 6 months is approximately the same.

Trained conscripts mustered out



During the past few years, the number of conscripts trained and mustered out has remained almost the same.

Attrition during military service



In accordance with the new physical examination guideline, fitness for service is evaluated throughout the period of liability for military service, which is likely to have increased attrition during military service in the last few years. In the most recent contingents, this trend has been broken.



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