Publication Series: 2
Research Reports N:o 15
ISBN: 951-25-1637-3
ISSN: 1237-3680

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STRATEGIC SECURITY

A Constructivist Investigation of Critical Security and Strategic Organisational Learning Issues: Towards a Theory of Security Development

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ACIE
Helsinki 2005

ABSTRACT

The aim of this research has been to study security phenomena in the framework of a learning organisation. The 'critical security approach' is the basis of the intervention, along with the help of the strategic planning perspective. The goals of this research are to construct both a strategic security model and a strategic security leadership model. By examining the conceptions of the personnel of the Finnish Ministry of Defence, models are constructed, tested, and further developed. The literature review is the basis of conceptualising the challenging field of this theoretical framework. The conceptual extent of the study may be a bit unusual for a dissertation, but outlining the research area from the literature review perspective clarifies the challenge.

The research emphasises the construction of security models in strategic planning and the learning organisation framework and concentrates on analysing and explaining the interaction between these key pillars. The key question in this research is: what is the role of strategic security in the changing environment of a learning organisation. Thus, this study may be seen as both descriptive and prescriptive.

The social constructivist approach combines mind-centred, interaction-centred, and experience-centred theories into one framework of strategic security leadership. Depending on individual preferences, situational factors, and the phase of the learning process, experiential, interactive, and transformative learning methods can be applied. Although the practices of strategic leadership are not the focus of this research, the social constructivist approach ensures that the frameworks, concepts, and models presented here may optimally support organisational and individual learning and efficiency of performance.

When the theoretical elements and practical efforts are unified in an organisation, the result is a wide-range security improvement program. Because of its strong connection to the education and leadership performances of the whole society in the framework of cultural entity, this kind of program is actually an organisational change-agency system. In order to function well, it has to be able to develop systematically according to the comprehensive feedback produced by an on-going evaluation process. Considering the modelling of strategic security, a review of previous research suggests that the model and the particular approach taken have to be constructed to fit the whole organisation and culture, as well as the surrounding national and international society.

The concept of strategic security is an attempt to do justice to the complexity of this multi-dimensional phenomenon. Strategic security leadership is a sub-concept of strategic security. Strategic security is a concept with horizontal and vertical variables. Changes in the complexity of the environment affect the balance of the respective sub-concepts and clusters; thus, maintaining an optimal balance is the key challenge of strategic security on all levels of an organisation.

The review of the performance progress towards the strategic security model suggests strategic security along with leader selection, education, training, change agents, and overall experience. This observation leads to the conclusion that the new security approach in the organisation does have the effect of changing the organisational culture in the Finnish Ministry of Defence. The task of security is to set some basic standards and to enhance the positive aspects that already exist.

From the starting points of the new strategic security paradigm, the following basic assumptions have been formulated: (1) a phenomenon called strategic security exists; (2) excellent strategic security can be modelled for any learning organisational environment; (3) excellent security leader-

ship can be modelled for any organisational environment; (4) an effective organisational strategic security program with supplementary frameworks can be built around modelled strategic security; (5) strategic security can be credibly and reliably measured on the basis of the principles of a full range of feedback; and, (6) the development of the productivity of an organisation is based on the development of the capabilities of strategic security, which should be seen as a lifelong process.

At the level of scientific theory, elements of the constructivism theory were defined ontologically, multidimensional security was defined epistemologically, and the phenomenographic approach was defined methodologically. At the theoretical level, three essential frameworks were defined and analysed: (1) the framework of critical security; (2) the framework of strategic planning; and, (3) the framework of the learning organisation in the 21st century. At the level of concepts, several core concepts were studied and defined: (1) the concept of the scientific paradigm; (2) the concept of strategic security; (3) the concept of security leadership; (4) the concept of strategic planning; (5) the concept of the Balanced Scorecard (BSC); (6) the concept of individual learning; and, (7) the concept of organisational learning. Regarding models, three essential models were created: (1) the conceptual cluster model of the strategic security model (SSM); (2) the strategic security leadership (SSL) model; and, (3) the concept of the security of the Balanced Scorecard.

The results of the empirical part of this research support the basic assumptions and the structure of the strategic security model. According to the results, the structure of the strategic security model as well as the six-factor structure of the leadership model are both consistent with the data. The analysis of overall transferability and credibility did not reveal any serious threats to the applicability of the strategic security model.

This research is most effective when considered holistically, where each part supports the other elements and, on the other hand, as creating a new analytic basis in the hierarchy of science. The phenomenographic approach used strongly implements a qualitative perspective and creates new information about strategic security in a learning organisation. The results of the empirical part of this work are important. However, even more important is the development in the security system of the Finnish Ministry of Defence. Still, several needs for further research exist. Theoretically, it is possible to formulate a constructivism theory of strategic security in which the concepts of learning and security tend to merge and coincide. This remains an inspiring challenge for the future. The new strategic security model should be studied from the points of view of scientific paradigms, other than the new paradigm of security.

Keywords: Social constructivist approach, phenomenography, critical security, strategic planning, learning organisation, strategic security model, strategic security leadership.

FOREWORD

This study was born and has been developed as a result of a two-step process. The framework of the process was the learning organisation and change leadership studies in the University of Helsinki since 1997 in its entity. The final push for this study came from the MOD, where I became the Security Officer in 2002. The concrete renewal of the security system of the MOD was a change that has, in practice, made possible the extensive execution of the development of the strategic security model.

The framework of this study has especially been supported by the opportunity to participate in the development of the comprehensive security and readiness progress of the MOD. The added value I have obtained from the cooperation with different domestic and international sectors has been a significant part of the whole process. When it comes to the scientific level of this research, I cannot overestimate the importance of feedback I have received from the domestic and international community, especially concerning the development of the modelling strategic security.

The previous years also include various separate projects and events that have provided new information and even new understanding, especially, on the strategic planning and critical security perspectives related to them. Questions relating to the concepts of strategic planning, the learning organisation and critical security are an interesting and necessary change agent from the viewpoint of strategic security leadership.

The arrangement of studying along with working as the Head of Security could have made possible the application of several approaches to a doctoral dissertation: for example, action research, the narrative approach, experiences-based produced by the process could all have been possibilities. However, the immensity and complexity of the research subject and the phenomena behind it are such that I decided to proceed with the current research orientation. Nevertheless, being a part of an extensive organisation at work meant that not all of the phases of the development process were up to me to decide.

Co-operation with the directors and supervisors up to the actual dissertation stage has from my viewpoint been seamless. Professor Hannele Niemi understands the life of an adult who studies and works at the same time. Professor Kauko Hämäläinen was the second director of my dissertation. He was not only an authority but also a fellow human when he entered the process at the empirical data evaluation phase of the study. Professor Sari Lindblom-Ylänne, the third director of my dissertation, entered the process at the finalisation phase. Professor Jarmo Toiskallio, as a supervisor, is the one who, from the time we first met gave faith in the success of the entire process. Since he is an important military pedagogical scientific authority, his guidance and encouragement has had a great significance in my coping. Docent Marco Krogars had an important role in the step-by-step guidance and finalisation of the empirical part of this research in the MOD. However, with Professor Paul Ilsley I perhaps had the most inspiring experiences and the most self-confident creative phases during the process, both in Finland and in the United States of America. Docent Mikko Valkonen, as security expert and authority in Finland, receives my special thanks for his support, co-operation and pragmatic support orientation over the security obstacles. Without the persistence of Professor Tomas A. Regelski I would hardly have been able to write my dissertation in APA Style English.

I owe my deep gratitude to each of my superiors and colleagues, because in a different atmosphere this process would never have progressed past the beginning. Nevertheless, I will not even attempt

to describe the utmost importance of my family, Eija and Janne, in making it possible to cope mentally through this process.

As a learner and a security leader, I think ahead in life, with an organisational strategic security portfolio in my backpack. I value the training and experiences that I have received and know that I am able to further develop as a strategic security leader and as an individual in my civilian duties. To the young strategic security leader, personal feedback is not a curse word or a four-letter word but a means to continuous lifelong learning. I want to learn and during my strategic security leadership period I have learned to learn. Encouraging feedback has supported me in this process, where the term strategic has the meaning of the learning of a leader.

Helsinki, Finland, November 08, 2005

Kalevi Mäkinen

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ABBREVIATIONS IN TEXT

ABC	Atomic, biological and chemical
BSC	Balanced Scorecard
CSF	Critical Success Factor
CSSM	Cluster Strategic Security Model
DACE	Defence Administration's Construction Establishment
DLM	Deep Leadership Model
DSA	Designated Security Authority
EFQM	European Foundation for the Quality Management
EQA	European Quality Award
EU	European Union
FDF	Finnish Defence Forces
FDS	Finnish Defence Staff
FICORA	Finnish Communications Regulatory Authority
ISP	Internal Security Program
IT	Information Technology
LO	Learning Organisation
MA	Master of Art
MAP	NATO Membership Action Plan
MIA	Ministry of Interior Affairs
MOD	Ministry of Defence
MFA	Ministry for Foreign Affairs
MOF	Ministry of Finance
MPED	Military Pedagogy
MTC	Ministry of Transport and Communications
MTI	Ministry of Trade and Industry
NATO	North Atlantic Treaty Organisation
NSA	National Security Authority
OECD	Organisation for Economic Cooperation and Development
OSCE	Organisation for Security Cooperation in Europe
SP	Secret Police
SPSS	Statistical Package for the Social Sciences
SSL	Strategic Security Leadership
SSLM	Strategic Security Leadership Model
SSM	Strategic Security Model
TQM	Total Quality Management
UN	United Nations
VAHTI	Governmental Information Security Guidance
VEIVI	Safety and Security survey

PART I

THE WORLD OF RESEARCH

“Here lies the bones, of lieutenant Jones

He died the first night,

of the fight

by using,

a school solution.”

An unknown author

Lake Balaton

Hungary, Europe (2001)

1 INTRODUCTION

The purpose of this study is to attempt to understand and interpret security in the framework of a learning organisation from the viewpoint of critical security. The conceptual field of the study's theoretical framework is challenging and multi-dimensional. The conceptual extent of the study may be a bit unusual for a dissertation, but this is the case with the practical implications of the study on the security of the Finnish Ministry of Defence (MOD) as well. Outlining the research area in other ways would have been possible and would even have helped in the writing of the report. However, at its current extent this study can function as basic research providing justification for further development of the safety and security of the MOD, the defence establishment, and can even be applied to the entire Finnish public and private sector administration.

In Finland the *concept of security* has traditionally been understood instrumentally while the international concept of security is moving towards a more abstract phenomenon. The criterion for looking at the security paradigm through educational research comes from the international field, since the new security paradigm affects the Finnish society as a whole. The demands of international institutions, national legislative duties and the tasks of the Government correspond to the status of security in Finland and to that of the MOD. This effect launches the need for change both in security thinking and in the practices of organisations. Continuous learning and development are needed in order to successfully change security processes. Thus, education in the changing situation is needed. However, in order to change conceptions of security new *modelling* (Anderson & Burns, 1989) for structuring the security concept at the MOD level is needed. On the other hand, as part of the Government the MOD is at a strategic level in society and therefore this approach opens the possibility for more general use of the *model*. (Anderson & Burns, 1989) The aim of the present

research challenges the defence establishment to a different approach and aims to promote discussion on the concept of security.

This study is built on a broad-spectrum of research tradition in the social academic world, and especially, in the educational academic world. The academic interest of the research is directed towards the development of security in a *Learning Organisation* (LO) (Senge, 1990) in the 21st century on the basis of modelling strategic security. This approach also divides the theoretic foundation of the study into three pillars of the learning organisation (Alasoini, 1999), *strategic planning* (Paris, 2003), and *security* (Krause & Williams, 2003). The area of safety and security follows the theoretical assumptions of the *critical paradigm of security* (Buzan, 1991). The area of education refers to the conceptions of *constructive learning*, also in the area of organisation, and the area of strategic planning applies *the balanced scorecard (BSC)* (Kaplan & Norton, 1996). These concepts are discussed in chapters 2, 3 and 4.

The basic theoretical choices mentioned above became more and more obvious as the research process progressed. Further research will bring to the surface the inherent assumption of this study's orientation. The deep structure of critical security, the learning organisation, and the constructive concept of learning is one efficient collective mechanism that the tools of academic research have not yet been able to comprehensively describe. Neither have the advantages of conducting comprehensive security as a learning mechanism in developing the organisation to be more effective at the strategic level been widely identified. The *concept of strategy* is generally understood to mean a plan designed for a particular purpose, or the process of planning something. (Krogars, 1998b)

International research that falls into the sphere of the new paradigm of security is surprisingly extensive while; on the other hand, national research surprisingly lacks academic studies concerning

the new paradigm. The Finnish Government has chosen ideas of strategic planning as a basic theory in the form of the BSC when developing the Finnish administration to meet future challenges. The LO is a phenomenon that has been intensively studied internationally in the last two decades and is an especially widespread and well-known spectrum of research in Finland.

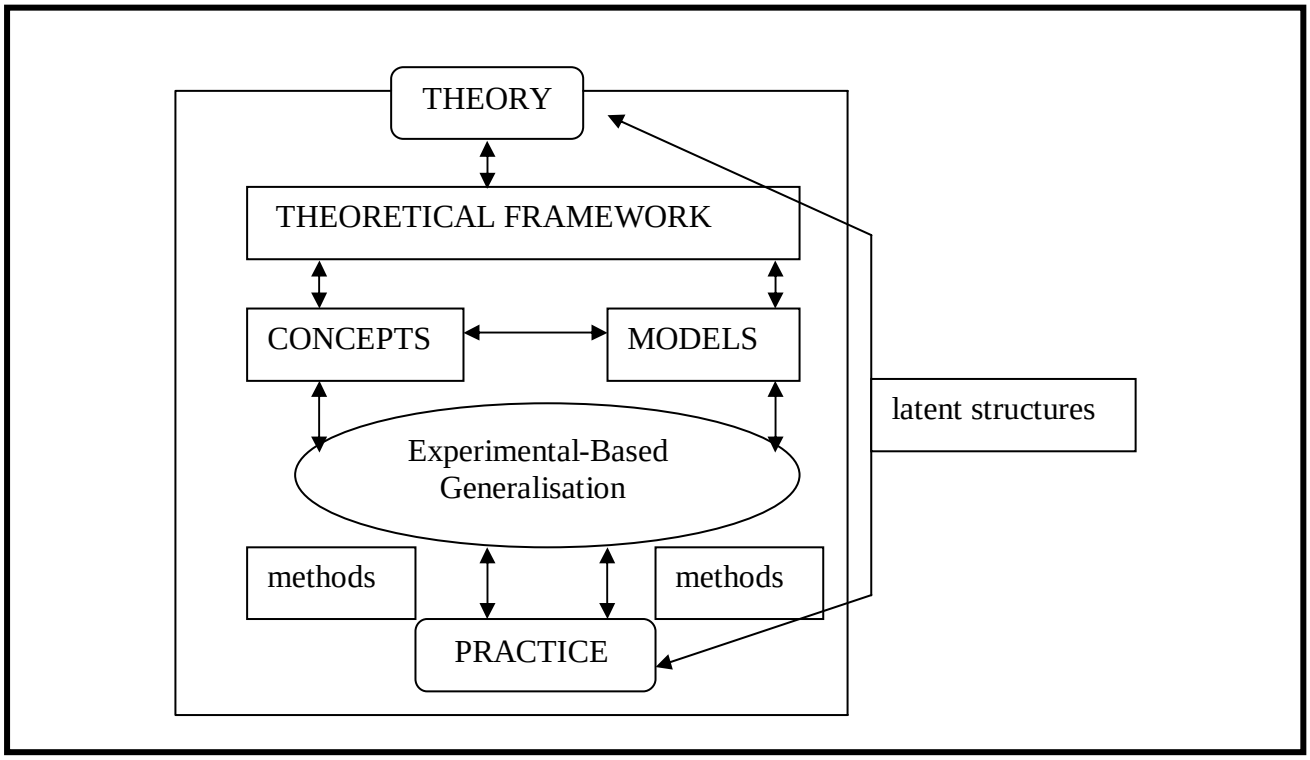
1.1 Research framework

The theoretical "recovery" of the study is based on the rise of the new paradigm from the 1980s with the emergence of new threats. As a manifestation of the criticism inside the paradigm, studies that specially called for deeper theoretical anchoring on the framework of vast practical-empirical research began to surface. Epistemologically focusing change from abstract individualism and sovereignty to stress culture, civilisation, and identity including the role of ideas, norms, and values involves moving away from the realist, objectivist, and rationalist approach towards more interpretive modes of analysis. On methods Haftendorn (1991) concludes that the goal of security studies is "to construct an empirically testable paradigm" for a "progressive" research program.

In the philosophy of science, problems of the study of security already become concrete at an early stage. The basic challenge is that the concept of security is unclear. The reason for this conceptual ambiguity may be the complexity that results from the multi-dimensional and multilateral concept and from our ability to perceive and understand such a phenomenon. This phenomenon is parallel to the ambiguity of the concept of the learning organisation. At the same time as we move into the 21st century an organisation must create a constant learning environment, a non-threatening working environment where people can communicate and collaborate with one another, a diversified environment for people to think differently and value each other's thinking, new ways of looking at

problems, and a culture that effectively leverages talent. Figure 1 presents the framework of the research orientation.

Figure 1. The framework of the research orientation.



Nevertheless, through their practices both public and private organisations have perceived the importance of *security* (Buzan, Waever & de Wilde, 1998) and the *learning organisation* (Alasoini, 1999) including the use of *strategic planning* (Paris, 2003) on success and productivity. This premise has given researchers the possibility of introducing their own models. Although this may often have a practical application and bring practical importance to the basis of security and development of an organisation, the foundation in academic context may be forgotten.

The new critical paradigm of security (Buzan, 1991) connected with strategic leadership (Nissinen, 2001) in the learning organisation (Senge, 1990) is very promising because of its academic possibilities. On the basis of new research the new paradigm of security connected with strategic leader-

ship (Niven, 2003) in the learning organisation may have possibilities to expand into the construction of a general theory of security with a general theory of strategic leadership in the development of the learning organisation. Connections to the *constructive concept of learning* (Shank, 2002), the *qualitative approach* (Denzin & Lincoln, 2003) and the *strategic planning model* (Paris, 2003) in the theory of the learning organisation (Senge, 1990) may also create a multidimensional and multilevel concept of structure on the basis of which the formation of a theory would be possible.

The prominence in debates over the nature of theory in the study of international organisations, epistemologically, involves moving away from the objectivist, rationalist approach and towards more interpretive modes of analysis (Krause & Williams, 2003, p. 49). In epistemological relativism, "no cross-framework judgements are permissible for the content, meaning, truth, rightness, and reasonableness of cognitive, ethical, or aesthetic beliefs, claims, experiences or actions can only be determined from within a particular conceptual scheme" (Fay, 1996, p. 77). Airaksinen (1994, pp. 10-12) states that in epistemology, the meaning of theory and practice is questioned. There are many different types of scientific information: practical knowledge, process knowledge, informational knowledge and theoretical knowledge (Turunen, 1990, pp. 68-83). Furthermore, the concept of scientific knowledge is changing; the complexity will remain. (Niiniluoto, 1996, pp. 54-66).

Personal epistemology in this research follows Kvale's ideas. Kvale (1999) states that epistemological development makes it possible to clarify the forms of validation taking place in research; a move from knowledge as correspondence with an objective reality to knowledge as a social construction of reality involves a change in emphasis from the observation of, to a conversation and interaction with, a social world (Kvale, 1995). Method as a guarantor of truth dissolves; with a social construction of reality the emphasis is on the discourse of the community and communication of knowledge becomes significant because of aesthetics and rhetoric entering the scientific dis-

course. Kvale's (1999) statement is that with the modern legitimation mania receding, there is an emphasis on pragmatic proof through action.

The *concept of constructivism* (Lincoln & Cuba, 2003) is still incoherent and unclear, and thus the social constructivist (Denzin & Lincoln, 2003) approach is a means of research, which also follows the study orientation throughout this research. At this stage it is reasonable to claim that using the social constructive concept of learning (Denzin & Lincoln, 2003) as the main idea of the analysis of learning does not exclude the usefulness and even necessity of other methodologies. The concept of constructivism is discussed later in this chapter.

In the *concept of the learning organisation* Alasoini's (1999, pp. 1-2) definition describes the approach of this study. Concepts and principles of the learning organisation include multiple skilfulness, the ability to perform multidimensional tasks by the personnel which includes rotation of tasks so that it supports professional and personal development, team and network-integrated ways of working and an empowering management practices, because those principles also include the extensive participation of personnel in the processes of development with solid and integrated cooperation in the development of processes and products along with other organisations, clients, research and educational institutions. These principles of the learning organisation also include an emphasis on bonus systems linked to skills: know-how, effectiveness and quality.

The definition of *strategic planning* by Paris (2003) is a structured approach by which to anticipate the future. The strategic plan should chart the broad course for the entire institution for the next five years and it should be a process for ensuring that the budget follow the plan rather than vice versa. (Paris, 2003, p. 1) Strategic planning determines where an organisation is going over the next year or beyond, how it is going to get there and how it will know if it got there or not. The focus of a

strategic plan is usually on the entire organisation, while the focus of a business plan is usually on a particular product, service or program. (McNamara, 1999)

The critical security paradigm defines security as a quality actor that is injected into issues by securitising them, which means to stage them on the political arena in a specific way, and to have them accepted by a sufficient audience to sanction extraordinary defensive moves. (Buzan, Waever & de Wilde, 1998, p. 204) This study combines both secure and safe, and security and safety, and uses the terms secure or security. This definition is broad, and as it is wider than either of the above mentioned separately it gives a new approach to matter at hand. This wider perspective of security makes it possible to combine it with strategic planning, and the learning organisation in a new way.

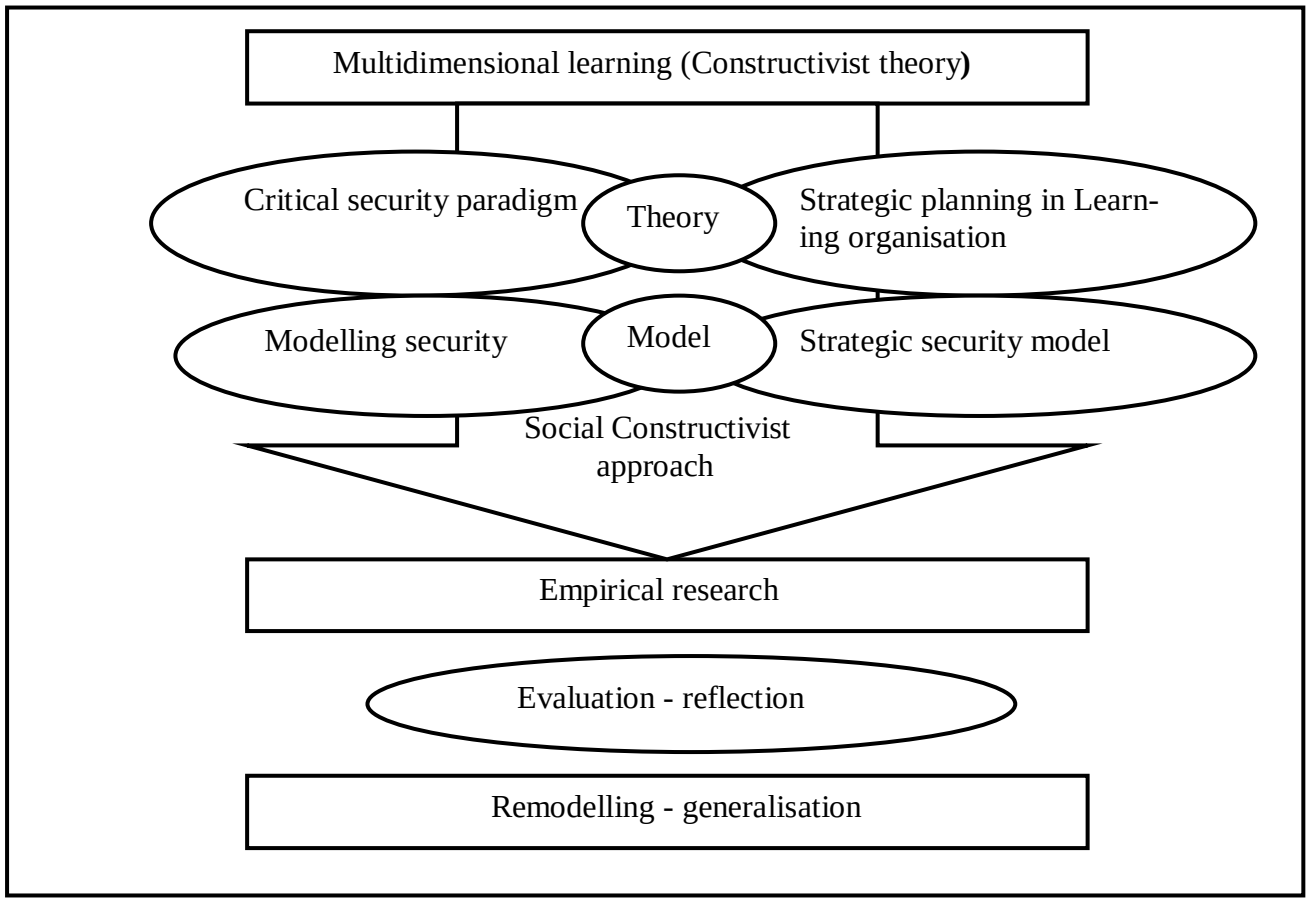
1.2 Structure of the study

The study is constructed both conceptually and concretely in the form presented in Figure 2. The world of *theory* has four chapters including this introduction. The world of *empiria* is made up of five chapters. This chapter views the social constructive concept of learning that defines the research orientation throughout the study. This approach is justified by the academic interest of the study, which is directed towards the development of critical security in a learning organisation. The constructivist approach links the study scope to the qualitative methodology of phenomenography, which is discussed in chapter 6. This chapter is important for understanding the challenging triangular framework of this study, and it links this study to the theoretical context.

The second chapter forms an entity from the basic assumptions of the concept of the *learning organisation*. This entity is examined as a learning system, referring to the volume of the leadership

and culture of the MOD and its indirect impacts on the entire Finnish society. This chapter includes the definition of the most central operating concept. The chapter also takes a look at the deep leadership model and leadership as an agent of change in an organisation. This chapter is important for the overall scope of the study's theoretical perspective.

Figure 2. The structure of the study.



The third chapter focuses on the definition of *strategic planning* and seeks a framework for interpretation from the latest international and traditional Finnish research fields on the relationship of strategic planning, thinking and management. The main components of strategic planning are separated from each other so that strategic planning can be seen to consist of the vision, the mission, the position of the leader, and of decision-making. The definition of the concepts also comes close to

generalisation from the general concept of cluster thinking. The importance of this chapter is essential in the sense of giving the vague definition of the learning organisation a clearer and more organised form. Thus, this chapter is essential to the study for characterising the theoretical framework.

The fourth chapter presents the entity of *critical security*, which is one of the basic foundations on which this research is theoretically based. The chapter begins with the definition of the concept of security and deals with different concepts of security while pointing toward to the new paradigm of security. This crucial part of the study will bring new things into sight and makes it possible to model security in a learning organisation, which is one of the main goals of this study. This chapter links the theoretical world to the empirical world of the study.

The last five chapters of the research project provide the world of *empiria*. Chapter five begins the empirical part of the report and explains the *study scope*. The chapter shortly introduces the epistemological basis for the empirical part of the study. Additionally, presentation of the MOD will guide the continuum to the empirical world of the study. Research questions are presented in this chapter, and thus the chapter is a central link to the methodology. Chapter six presents the *methodology* of the study. The chapter describes data collection and analysis methods and shows the characteristics of the data collection with a literature review, security surveys, interviews and observations of the study. The data analysis process with systematic analysis and phenomenographic evaluation deepen the academic approach. The research procedures, the method of information collection and the heuristic hypotheses related to the data are presented. Bracketing data implements the hierarchic and structural nature of the findings and information, which is described in the next chapter. The methodological approach as previously explained provides the results, which are the aim of the study.

The seventh chapter presents the *results* and outcomes of the empirical research with responses to the research questions. Reflecting to the previous chapters and to the contents of the world of theory, result interpretations from the findings are reported. *Modelling* of security on the basis of theoretical research forms the SSM and enables re-modelling from the basis of empirical research as one of the key outcomes. The summarising section creates the justification for the structural formation of the SSM and its empirical testing. The modelling as well as interpretations with the academic approach justify qualitative research, and direct the study towards the conceptions of participants. The developed SSM is re-modelled placing the model in a more extensive framework that supports organisational strategic planning needs and the personal development of the individual leader. The structure of the model and its contents are described in detail in this chapter.

The praxis of the empirical research ends in chapter eight with observations and discourse that have accumulated throughout the entire research project. The chapter also includes critique on the application of the model with reflection on the research questions. This chapter practically shows the constructivist orientation of the research in modelling security with the help of perceptions of MOD personnel. The study report ends with a discussion in chapter nine. The discussion combines the observations of the research process and briefly introduces the most important results. In order to honour the paradigmatic approach the first part of the discussion is built on the basic assumptions. The discussion includes a look at further research relating to strategic security and the SSM. The next section considers the social constructive concept of learning that defines the research orientation throughout the study.

1.3 The concept of constructivism

Constructivism is a multidisciplinary approach that combines different academic trends from the viewpoint of education. Educational psychology is learning-wise a central field of the academic world. Through progressive pedagogics (Dewey, 1927/1954), behaviorism (Anderson & Burns, 1989, pp. 10-34), cognitivism (Niiniluoto 1983, pp. 71-100), the humanist concept of learning (Nissinen, 2001, pp. 37-38) and experiential learning (Kolb, 1984, pp. 4-19) goes the road of constructivism. (Puolimatka, 1995, pp. 127-133)

The constructivist approach is categorized as belonging to the qualitative research heritage. *Qualitative research* is a form of systematic empirical inquiry into meaning (Shank, 2002, p. 5). Denzin and Lincoln (2003) define qualitative research as:

> "Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, and phenomena in terms of the meanings people bring to them. … Qualitative research involves the studied use and collection of a variety of empirical materials – case study; personal experience; introspection; life story; interview; artefacts; cultural texts and productions; observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives." (2003, p. 5).

The term *uninvolved observer* signifies an epistemological relationship between the interpreter and the object of the interpretation in which the interpreter is unaffected by the act of interpretation and thus, understanding is interpretation. (Schwandt, 2003, pp. 300-301 and p. 322) Constructivism considers a subject as active, and reality is formed as a result of the cognitive processes of the individual. This view does not exclude the existence of reality outside the subject, but notes that to us it manifests itself in the form of the experimental structures of science. (Niemi, 1999, p. 216)

Constructivism adopts relativist ontology and relativism, a transactional epistemology, and a dialectical methodology, and the user of this paradigm is oriented to the creation of reconstructed understandings of the societal world. (Lincoln & Guba, 2003, p. 247) Social perspective theories bring the entire social environment, including culture and society, into the centre of the cognitive equation. The constructivist paradigm assumes "a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent co-create understandings), and a naturalistic (in the natural world) set of methodological procedures" (Denzin & Lincoln, 2003, p. 35). Acting and thinking, practice and theory, are linked in a continuous process of critical reflection and transformation. (Schwandt, 2003, pp. 294 – 295) In the constructivist paradigm terms such as credibility, transferability, dependability, and conformability replace the positivist criteria of internal and external validity, reliability, and objectivity. (Denzin &Lincoln, 2003, p. 35)

The basic assumptions of the constructivist approach emphasise key concepts. In constructivism the learner constructs knowledge and cognitive strategies, and, learning involves qualitative restructuring and modification of schemata. (Lonka, 1997, p. 20; Sinkkonen, Kuoppala, Parkkinen & Vastamäki, 2002, p. 269) According to constructivism reality can be known by our cognitive structures. (Sinkkonen, et al., 2002, p. 269) Constructivists seem to be divided between those who ad-

here to the possibility of an emancipatory critique and those who, in adopting the antipoetic approach, defend the value-freedom of science as a closed system. (Nissinen, 2001, p. 33)

However, the concept of constructivism is incoherent. C*onstructionism* is also called constructivism, especially in political science. In the constructionist view, the learning process is not the passive reception of a preexisting, objective reality but a process of creation in environment. Our understanding of the world is not an interpretation of what is, but a summary of attitudes formed by social interchanges within the present historical context. (Bandura, 1977; 1986; Rohmann, 2000, pp. 363-364; Vygotsky, 1962; 1978)

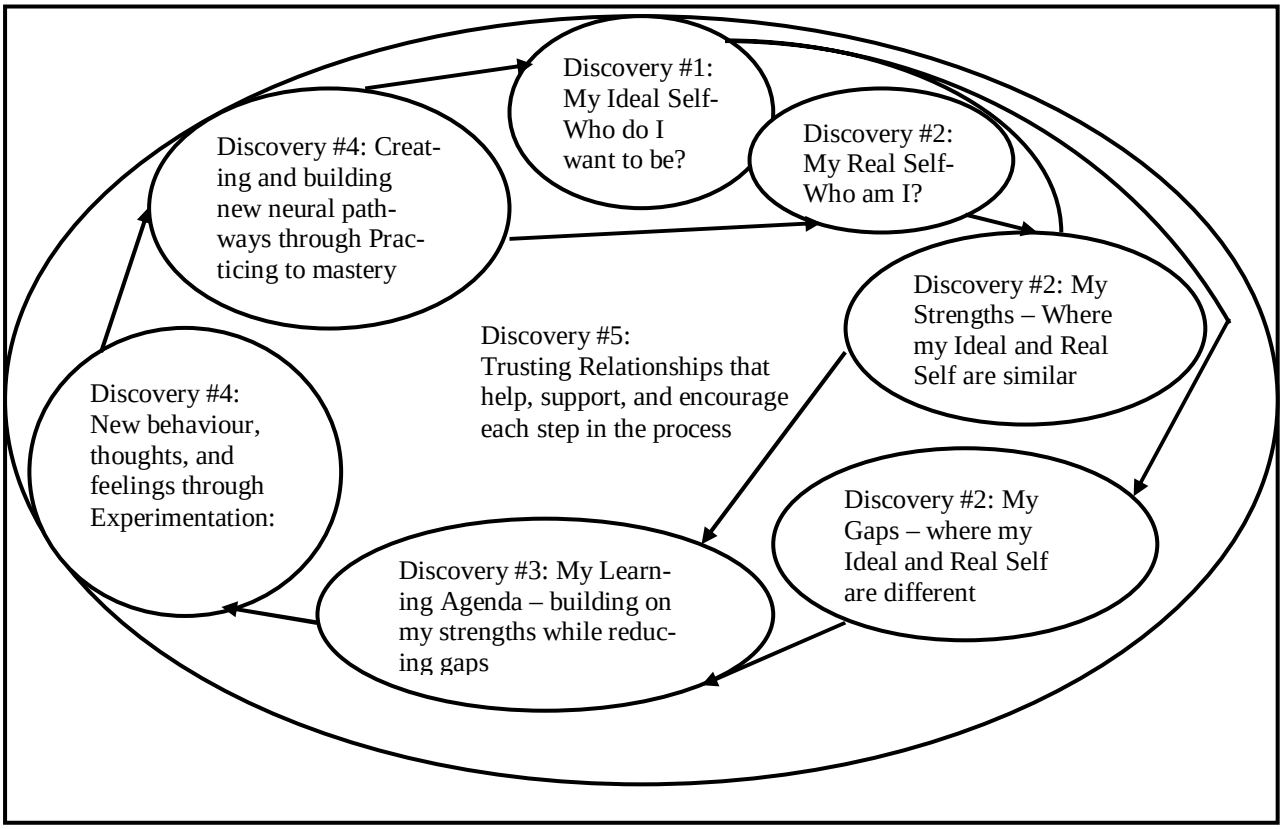
The reason for selecting constructivism as an approach in this study is that it is a critical engagement with society and the academic world and their interlinked systems of knowledge. The emphasis is on how social actors construct their reality and the implications for social science. For constructivists social reality is not something outside the discourse of the academic community but is partly constituted by it. The *critical security paradigm* views systems very much in constructivist terms. “Defining security as a self-referential praxis must constitute radical constructivism, on the security axis” (Buzan, Waever & de Wilde, 1998, pp. 203-204). The critical security approach is radically constructivist regarding security, which is a specific form of social praxis and the core phenomenon of this study.

1.3.1 The constructivist concept of learning

The phenomenon of human learning can be approached from many conceptual directions, with a number of research methods. The question is whether we are able to construct a synthesizing

framework in order to exploit all of these theoretical approaches, not what is right or wrong. A conception for the added ability to evolve, feel, and adapt is required. Even though these theories have merits in explaining definite aspects of knowledge acquisition, no approach adequately addresses the issues of consciousness, self-awareness, and self-reflection. (Reynolds, et al., 1996, p. 93) The process of self-directed learning is shown in Figure 3.

Figure 3. Boyatzis' theory of self-directed learning (Boyatzis and Taylor, 2003, p. 231).



Adults learn what they want to learn, and even if acquired temporarily, soon forget things. (Specht & Sandlin, 1991, pp. 196-210) "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38). It appears that the most sustainable behavioural change is intentional. Self-directed change is an intentional change in the aspect of who you are, the real, or who you want to be, the real, or both. Self-directed learning is self-directed change in which

you are aware of the change and understand the process of change. (Boyatzis and Taylor, 2003, p. 231) This perspective was chosen, because it supports the critical security approach and the strategic learning perspective.

This is an enhancement of the earlier models developed by Kolb, Winter, Berlew, and Boyatzis. (Kolb & Boyatzis, 1970a, pp. 267-289: Kolb & Boyatzis, 1970b, pp. 439-457; Kolb, Winter & Berlew, 1968, pp. 453-471) The description and explanation of the process is organised around the five points of discontinuity. An individual might begin self-directed learning at any phase in the process, but it will often begin when the person experiences a discontinuity and a related epiphany, or an instant of consciousness, and a sense of urgency. (Boyatzis, 1994, pp. 304-323; Boyatzis, 1995; pp. 50-94; Boyatzis & Taylor, 2003, p. 232) This model can be analysed so that: (a) knowledge is a transformation process, being continuously recreated, (b) knowledge is not an independent entity to be acquired or transmitted, (c) the process emphasises adaptation and learning as opposed to content or outcomes, (d) learning transforms experience in both its objective and subjective forms, and (e) leads critical aspects of the learning process.

People can change on a complex set of competencies that we call *emotional intelligence*. These competencies distinguished outstanding performers in leadership and professions, and the improvement lasted for years. (Boyatzis, Cowen & Kolb, 1995) Learning is a self-centred process in which the learner selects, interprets and analyses information based on earlier information and experiences. This learning process has always been connected to the situation and culture. “The interactive process and schemes of the learner form the basis of new structures of meaning” (Rauste-von Wright & von Wright, 1994, p. 15). The art of learning qualitative inquiry starts with refining basic skills that an individual already has (Shank 2002, p. 3).

A theory of self-reflection with transformative learning is needed to give an explanation on how an adult learner gives meanings to his own experiences and solves conflicts of meaning; how an adult structurally constructs his experiences and produces meanings for things. The concept of *situational learning* means a change that takes place in our way of interpreting situations. In these interpretations people may supplementarily develop their capability to deal with experiences. (Mezirow, 1991, pp. 70 – 94) Three different types of learning are described. First, instrumental learning controls and manipulates the environment. Second, communicative learning understands the meaning of what is being communicated. Third, reflective learning understands oneself and one's perspectives. The transformation of meaning perspectives always involves the critical reflection of the process of becoming critically aware of how and why our assumptions have come to restrict the way we observe, understand, and feel about our world and making choices upon new understandings. (Mezirow, 1991, p. 167)

Constructive learning from the individual's perspective involves the most effective internalisation as learning is connected with continuous change and development, practice and experiments, evaluation and feedback. In an open process evaluation and feedback act as motors for redevelopment and change. (Vesalainen & Strömmer, 1999, pp. 113-115) Even one simple concept, phenomenon or thing can be interpreted, analysed and understood in many different ways and this is what happens in connection with learning. When analysing the results of learning, one should concentrate on finding out what kind of interpretations have been taken in (Patrikainen, 1997, p. 256). This phenomenon is an entire context in itself, from the micro level to the macro level, i.e. from the level of a single emotion, situation and choice of words through social interaction to a wider cultural context.

In *cultural learning* there are three types of learning: imitative, instructed and collaborative. The theory of the importance of social cognition in the theory of cultural learning is based on understanding others as intentional, mental and reflective agents. In cultural learning the child does not learn from the adults' actions, but through the adults' perspective in a truly inter-subjective fashion. (Kruger & Tomasello, 1996, pp. 369 – 372)

In the Finnish defence establishment equivalents to the constructive learning approach may be found in *military pedagogy* (MPED) defined as pedagogy for and within the armed forces. Its goal is the goal-oriented leadership, training and education of soldiers. The philosophical basis of MPED may be found in the European cultural and philosophical tradition and in American pragmatic philosophy and pedagogy, which holds that in the process of human growth every experience and reflection form the basis for new experiences. This approach may also be called constructive learning. (Kangas, 1999, pp. 11-20; Rauste-von Wright & von Wright, 1994, pp. 17-20 and p. 33; Toiskallio, 1998a, p. 16 and pp. 33-35; Toiskallio, 1998b, pp. 8-9 and 12-13; Toiskallio, 2000a, pp. 11-17)

Learning to learn is an ability that must be developed alongside "normal" learning. The emotional dimension of an individual's personality has to be fully taken into consideration, because developing as a leader and as an individual is a comprehensive growth process. In developing cognitive capabilities, an individual and a leader need thorough meta-affective capabilities as well. Everyone can develop the skills in learning and thinking, and the best learning methods are frequently the simple ones. Looking at social change, many say that it is increasingly important to understand and control how to learn, rather than what to learn. (Dryden & Vos, 1997, pp. 8 – 12)

In the study framework situated cognition stresses both the process that occurs in the mind, as well as the affordances within the environment that contribute to the formation of mental models. The

situation and the frequency of engagement in the situation are important variables in security knowledge acquisition in the MOD. Security knowledge, both everyday and academic, as a construction shaped by its context is the characteristic principle for constructivism.

Changes take place among values, appreciations and attitudes. Experiencing competence related to development influences the development of personal capabilities. (Nissinen, 2001, pp. 47–48; Toiskallio, 1998a, p. 29) Knowledge control in the definition of cognitive processes is tied to the entity of the human personality. They are not separate parts of human activity or that of security leader development. Acquiring competence experiences requires having opportunities for independent activities, and thus positive feedback related to personal development encourages the individual towards supplementary active duties. This connects individual knowledge and learning to organisational security learning. Thus, the creation of individual knowledge as a part of contextual organisational learning has its relevance in this study.

To understand learning and the nature of knowledge is critical. Conceptions of learning and knowledge are difficult to separate from each other when the research is based on a constructivist approach. (Lonka, 1997; Schwandt, 2003, pp. 294-295) The *concept of learning* may indicate the basic assumptions made about the nature of the learning process, or the scheme formed at the individual level about learning that directs the activities of an educator. A paradigmatic dichotomy distribution of the concept of learning is based on either the empirical-behaviouristic or the cognitive-constructive approach, and additionally, a humanist concept of learning may be distinguished by emphasising the importance of experiential learning.

The constructive conception of learning sets new requirements for any organisation, such as the MOD, to apply these principles. The constructive learning process is attached to the each setting

and culture. The quality of social interaction in the learning process contributes to the process in which the individual's meaning perspectives are constructed. This perspective means that educational planning should also envelop the circumstances under which the constructive conception of learning can be useful as a function of change in individual meaning perspectives. The defence establishment follows similar development in Finnish society (Kalliomaa 2004, pp. 20-21).

1.3.2 Social constructivism

Social construction is interested in how utterances work as a matter of understanding social practices and analysing rhetorical strategies in discourse. Thus, how utterances work is neither a matter of cognitive analysis of mental versions of the world nor a matter of the empirical analysis of content and logical analysis of relations of words and sentences. (Schwandt, 2003, p. 306) The argument that "the world is constituted in one-way or another as people talk it, write it and argue it" (Potter, 1996, p. 98) explicates critique for a representational theory of language and knowledge. Constructionism is nothing more or less than a "form of intelligibility, a selection of propositions, arguments, metaphors, narratives, and the like, that welcome inhibition" (Gergen, 1994a, p. 78). Social constructionism merely invites one to play with the possibilities and practices that are made coherent by various forms of relations, because: "It is human interchange that gives language its capacity to mean, and it must stand as the critical locus of concern" (Gergen, 1994a, pp. 263 – 264).

The *meaning realism* is the view that meanings are fixed entities that can be discovered and that exist independent of the interpreter. In this respect, Gergen (1994a) and Potter (1996) with their social constructionist views share with philosophical hermeneutics the broad critique of meaning as an object, and they display an affinity with the notion of the coming into being of meaning. In epis-

temological relativism, “no cross-framework judgements are permissible for the content, meaning, truth, rightness, and reasonableness of cognitive, ethical, or aesthetic beliefs, claims, experiences or actions can only be determined from within a particular conceptual scheme” (Fay, 1996, p. 77).

It is only a short step from epistemological relativism to ontological relativism. If all we can know about reality depends on our particular conceptual scheme, is it not the case that reality itself can only be how it seems in our conceptual scheme. (Fay, 1996; Smith, 1997; Schwandt, 2003, p. 324) All of the presented views take the issue called meaning realism, i.e. the view that meanings are fixed entities that can be discovered and that exist, regardless of the interpreter. In this respect, these social constructionist views critique meaning as an object, and they display an affinity with the notion of the coming into being of meaning. Potter (1996), Taylor (1995) and Gergen (1994a) endorse an expressivist-constructivist theory of language, in which language is understood as a range of activities in which we express and realise a certain way of being in the world. Language is seen neither as primarily a tool for gaining knowledge of the world as an objective process nor “as an instrument whereby we order the things in our world, but as what allows us to have the world we have. Language makes possible the disclosure of the human world” (Taylor, 1995, p. ix).

Radical social constructionists, such as Gergen (1994a, 1994b) and Denzin (1997), apparently support the idea of forms of life and yet simultaneously claim that social constructionist philosophy leads to an improvement of the human condition. Denzin (1997) discards a realist epistemology, one that “asserts the accurate representations of the world can be produced, and that these representations truthfully map the worlds of real experience” (Denzin, 1997, p. 265) and defends the standpoint of epistemologies that study the world of experience from the point of view of the historically and culturally situated individual. Longino (1990, 1993a, 1993b, 1996) provides a modest version of social constructivism, and criticises traditional epistemology for ignoring methods of discovery,

or heuristic biases. Longino (1993b) challenges the view that knowledge is the production of an individual cognitive process. If we perceive the practices of inquiry and knowledge production as social and accept the view that objectivity is a function of social interactions, then we can begin to explore how to criticise background assumptions effectively. (Longino 1993b; Schwandt, 2003, pp. 308-309) All philosophers do not consider social constructivism as an ontological doctrine, and thus take no position on what sorts of things exist and what their status are. Instead the question is how is it that a descriptive utterance is socially or interactionally, made to appear factual, neutral, independent of the speaker, and merely mirroring some aspect of the world. (Schwandt, 2003, p. 306)

Social constructionist epistemologies aim to "overcome" representationalist epistemologies in a variety of ways. In a sense, we are all constructivists if we believe that the mind is active in the construction of knowledge; knowing is active, which means that the mind does something with impressions, forming abstractions or concepts at the very least. In this sense, constructivism means that human beings do not find or discover knowledge so much as we construct or make it. An individual invents concepts, models, and schemes to make sense of experience, and continually tests and modifies constructions in the light of new experience. The construction of interpretations takes place against a backdrop of shared understandings, practices, language, and so forth. (Schwandt, 2003, p. 305) Social inquiry is a distinctive praxis meaning that a person makes up "theoretical" concerns about what constitutes knowledge, i.e. how it is to be justified, and about the nature and aim of social theorising. (Schwandt, 2003, pp. 294 – 295)

The concept of social constructivism is incoherent, as was mentioned in chapter 1.3. Rohmann (2000) clarifies the unclear concept of constructivism as follows: "*Social constructionism* is also called social constructivism, especially in political science; it is thus often confused or conflated with constructivism, a related psychology theory associated primarily with Jean Piaget, which as-

sumes an objective reality that we apprehend through the construction of cognitive patters in response to environmental influences" (2000, p. 363). Social constructionism locates the mind not within the individual but in the individual-in-social-interaction. (Vygotsky, 1978, p. 56)

However, social constructivism is an ontological doctrine, and thus, takes a position on what sorts of things about security exist and what their status is. Thus, in this study a descriptive utterance is not socially and inter-actionally made to appear stable, factual, neutral, or independent of the speaker, but instead a communicative and interpretive aspect of the world. Social constructivism with socio-cultural tendency supports our understanding with the impact of the social and cultural context on both individual and organisational learning. Activity is typically linked to participation in culturally organised practices in society, whereas constructivist perspective gives priority to individuals' sensory-motor and conceptual performance. In general, participants of an organisation should have enough opportunities to interact with peers and with their more-experienced colleagues. An active, involved learner in a specific context is a key component in the successful learning situation. Individual centred approaches such as strategy instruction, meta-cognition, and selective attention become important aspects of successful organisational security development programs. Constructivism means that an individual as a part of an organisation does not discover knowledge, but instead constructs or makes it by inventing concepts, models, and schemes, by making sense of experience, and continually testing and modifying constructions in the light of experiences. The construct of interpretations reflects against a setting of shared understandings, practices, language, and other learning experiences. Socially an individual makes up "theoretical" concerns about what constitutes knowledge, i.e. how it is to be justified and about the nature and aim of social theorising.

The motive for selecting constructivism for the study is that constructivism involves a critical engagement with society and science and their combined systems of knowledge. That is why reality is socially constructed with the approach of social constructivism. Social research is a practice, not simply a means of knowing. Hence, the practice of social research is not immune to effects of the central forces in the culture of modernity, such as professionalisation, technologisation, and securitisation. Thus, the terms constructionist and constructivism in this study discuss the social end of the continuum, because the object of the study, the MOD, is a part of Finnish society and thus is influenced by the changes in both the international and national environment. In the next chapter the learning organisation paradigm is analysed in the context of social constructivism.

2 THE LEARNING ORGANISATION CONTEXT

The European Union (EU) has outlined visionary aims for developing a "knowledge based economy" (Nyhan, Cressey, Tomassini, Kelleher & Poell, 2003, p. 9) and for constructing "a European area of lifelong learning reality" (Nyhan, et al., 2003, p. 9). Many European development projects have taken place that focused on the renewal and co-operation of different participants from vocational education, human resources and adult education backgrounds. European society has been challenged to build efficient organisations, and effective places to learn, in other words *learning organisations* (LO). (Alasoini & Kyllönen, 1998, pp. 17-45; Nyhan, et al., 2003, pp. 9-37)

Technical and social development in the Western world has led, through a technological revolution, to an increase in information. A characteristic of this development is a continuous, accelerating change that is hard to predict. (MTC 4/2004) People attempt to control change in numerous ways, for example, with networking systems, by lowering organisations, by focusing on research, and by changing their management. Researches have shown that learning organisations and development-oriented individuals have the most success in controlling change. (Nissinen, 2001, p. 125; Tichy & Devanna, 1986, pp. 271-280)

Changes in the public sector have resulted in decentralisation, delegation, and increasing autonomy on a global level together with reforms in monitoring, management, financial administration and budgeting. The aim has been a greater orientation towards customers, flexibility, effectiveness, quality and savings. (Arnkil, Arnkil & Eriksson, 1998, p. 214) Organisations must emphasise two things: talent and environment. Innovating and changing faster than the toughest competitors

achieve sustainable competitive advantage. The talented driver is the leader who maintains the winning combination of continuous development. (Chowdhury, 2003, pp. 1 – 2)

The Finnish defence establishment participates in the above-mentioned trend because the Government has emphasised the principles of the LO and the Ministry of Defence (MOD) has decided to be one of the pilot organisations within the public administration. The LO paradigm has a strong Finnish theoretical background and it has a European context. (Nyhan, et al., 2003, pp. 9-37) Thus, the LO is a general theoretical framework. In order to outline the concept of a LO it is necessary to deal with learning, organisation, leadership and culture in relation to the environment. To support the formation of the concept, the micro concept of the environment must be analysed. The following paragraphs deal with the concept of the LO environment by describing four basic dimensions in the complexity of conceptualising the LO.

2.1 The concept of the learning organisation

Organisation means an organised group of people, or the activity of organising something, and maybe even a condition or state of being organised, "organisation is an artefact of the mind that views it" (Culbert, 1996; Culbert & McDonough, 1985). The division of organisations by function shows the huge variety of possibilities of defining organisations, e.g. as human facilitators, as society, as spiritual institutions, as political institutions, as instruments of system maintenance and enhancement, as change agents, as culture and counterculture, as tools of policy description, as tools of development, as destructive forces, as instruments of repression and domination, as alienators, as tension-management systems, as threats to individual rights, as the administrative state of governance, and organisations as instruments of globalisation. (Farzmand, 2002a, xv-xxvii)

Organisations may be divided to four distinctive organisational forms: network, mercenary, fragmented, and communal (Goffee & Jones, 2003). In an open environment there is a direct contact to external change. Success takes place in relation to an organisation's ability to anticipate, control and even direct that change (Kettunen, 1997, pp. 10-14). Systematic support for learning and the development of its members is characteristic to the LO. (Jarnila, 1998, p. 132-136)

Organisational theories may be categorised according to the instrumental rationality of the classical and neoclassical traditions; the systems theory pointing to the broader concepts of organisations with their rational and environmental determinism; and the critical and interpretive theories which focus on process and change-orientations leading to improvements in human life and society intertwined by organisational rationality of modern capitalism and bureaucratic order. The core of all these theories is the fight between organisations and individuals, as well as the organisations' changing environments. (Farazmand, 2002b, p. 49)

In Finland as well as abroad the LO has widely been analysed. The theory of the LO includes personnel developing their own potential capacities which are required under the meaning of learning, i.e. in the art and practice of collective learning. (Senge, 1999) In the 21st century the strategic development of the LO emphasises talent and environment. (Chowdhury, 2003) The organisation should create a stable learning environment embracing positive challenge and a non-threatening setting where persons can communicate and collaborate with one another. Three capabilities are required from modern organisation and public services leaders: vision, dialogue, and the quality of communication between senior management and the organisation. (Kakabadse, 2003, pp. 56 - 57)

The critical self-evaluation process in the Finnish defence establishment has analysed strategic change and the LO paradigm in the MOD directing the change process and generating guidelines

for the reorganisation process of the MOD. The result of this process showed that there was a great will for change, and civil servants also had the principal ability to describe the change process with emphasis on the three crucial elements towards the LO: openness, diffusion of innovation and learning capability. (Krogars, 2001)

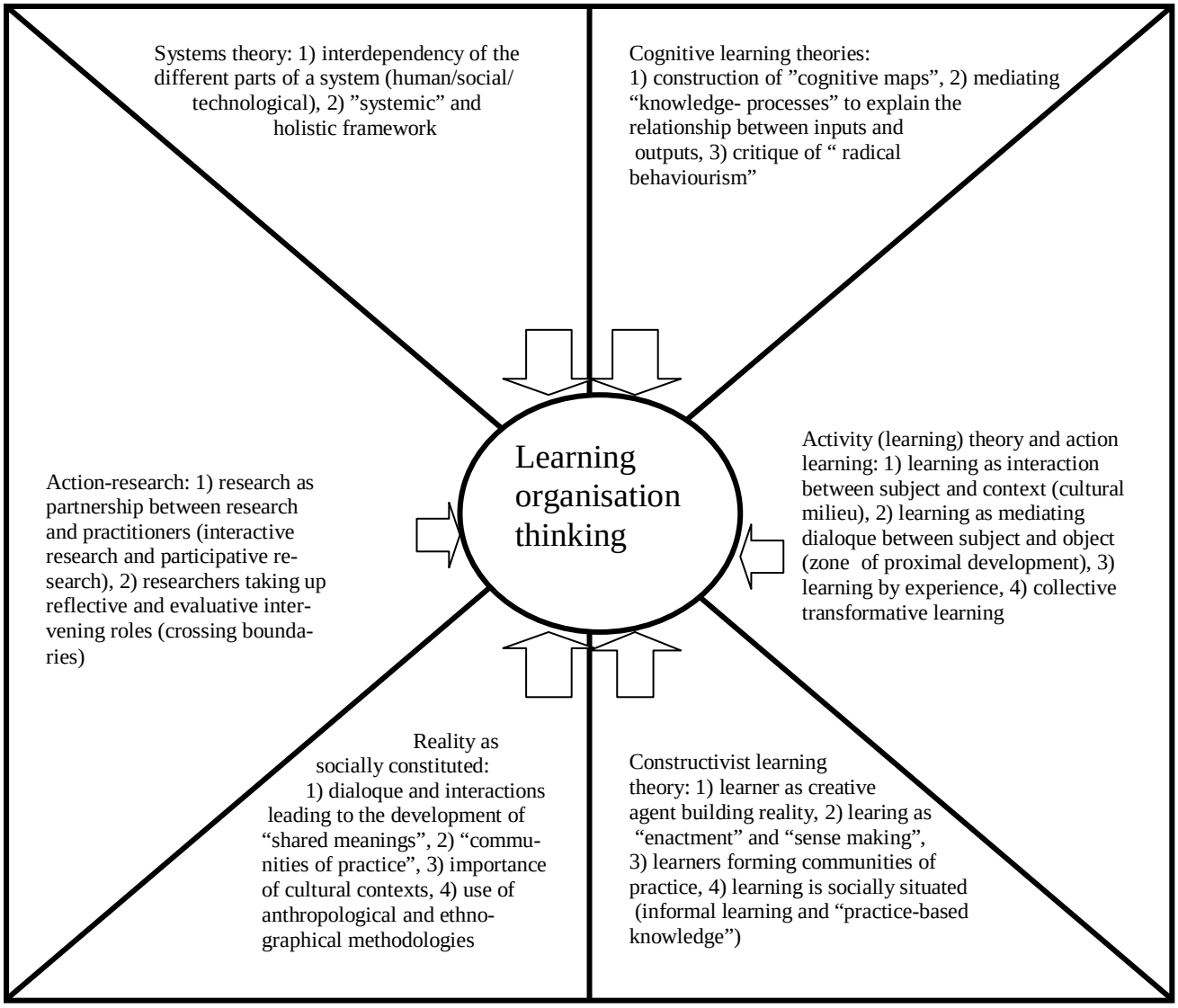
It is possible to speak about LOs where the characteristics are creativity, innovativeness, situation sensitivity, low hierarchical structures, networks, great individual freedom of action and flexible organisational structures and routines. (Sarala & Sarala, 2001, pp. 53-59) The needs for growth of the members of the organisation are satisfied more than in other environments. (Bass, 1985, pp 20-24; Nissinen, 2001, p. 126) The widest definition of the LO used by Moilanen is:

> "A learning organisation is a consciously managed organisation with "learning" as a vital component in its values, visions and goals, as well as its everyday operations and their assessment. The learning organisation eliminates structural obstacles of learning, creates enabling structures and takes care of assessing its learning and development. It invests in leadership to assist individuals in finding the purpose, in eliminating personal obstacles and in facilitating structures for personal learning and getting feedback and benefits from learning outcomes" (Moilanen, 1999).

"A learning company is an organisation which facilitates the learning of all of its members and continuously transforms itself" (Pedler, Burgoyne & Boydell, 1991). The key concept in the LO is "that of inquiry, interaction with one another on behalf of the organization to which they belong in ways that change the organization's theories of memories and programmes" (Argyris & Schön, 1978, p. 191). The LO may also mean "a system of improvement and self-improvement (enhancement of competence) of individuals, groups, and the whole organisation, including their formal and informal purposes, structures, rules and values" (Franz, 2003, p. 64). A new agenda of the LO is

moving towards cross-disciplinary theories, trying to find a structure around the idea of learning in socially situated collective contexts. Figure 4 presents an overview of the way in which different strands of learning and organisational thinking might interconnect in promoting cross-disciplinary thinking of the LO. (Nyhan, et al., 2003, pp. 79-80)

Figure 4. Making connections between "organisational" and "learning" strands of thinking (Nyhan, et al., 2003, p. 80).



The opportunity for lifelong learning provided for every participant is one of the basic criteria of the learning organisation. Lifelong learning covers all aspects of the individual's personal development and learning throughout his the entire life, where it implies an eagerness to participate in the process of change, an open attitude, and active pursuit of fresh knowledge. (Otala, 1998, pp. 173-176) Otala (1998, p. 173) characterises the learning organisation as including; (1) a shared vision and objectives known by every participant as a basis of all internal development, (2) participants knowledge and expertise to grasp the situation and the path to the organisation's objectives, and (3) shared values, which guide all activities and success is based on behaviour according to the values.

The concept of the LO includes the individual's opportunity for lifelong learning covering all aspects of his personal development and learning, implying an enthusiasm for participating in the process of change and an open attitude. The definition of the LO includes: a shared vision, objectives known by every participant, knowledge and expertise to take hold of situations, and shared values guiding activities. Success is based on behaviour according to the values. Simultaneously, critics explore that the LO is an untested theory-no empirical results exist and that it is idealism with broadness and holistic aim. Cultural dimensions affect the learning organisation's leadership style, as well as its followers' wishes, motivational needs, values, beliefs, and attitudes.

Even though the viewpoint is individual-oriented to the concept of the organisational environment, the environment is the physical and intellectual-cultural environment in which an individual leader functions. Observations influence the formation of meaning perspectives, where the environment, activities and the consciousness of the leader are in continuous interaction. The level of interaction is connected to the influence of his environment. The concept of environment includes not only external factors but also situational and contextual factors, i.e. the meaning perspectives are tied

together as broader operating schemes. Thus, the next chapter will handle the concept of leadership in more detail, also for the reason that it is a vital phenomenon in the concept of organisation.

2.2 The concept of leadership

Leadership is a personal issue about the use of oneself to be influential, persuasive, and embody the organisational vision. (Burke, 2003, p. 296) “Leadership is an influence process that is non-coercive in nature and produces acceptance or commitment on the part of organizational members to courses of action that contribute to the organisation’s effectiveness” Vroom (2003, p. 70).

The interpretations of leadership may be listed. First, leadership is seen, as a distinct kind of effort that may, or may not, be required according to the demands of the conditions. Second, leadership is similar to a strong drive that spurs the human being to act, and consequently has nothing to do with position, authority, or holding office. According to the third interpretation, leadership is not always essential, as good management can likewise accomplish gradually achieved success. Fourth, leadership is linked to the execution of power, and a vision can be realised throughout the mobilisation of resources. According to the fifth understanding, the effective exercise of leadership requires broad potential, in that the knowledge of products, services, and markets, and the application of functional skills must be matched by drive, power, and a wide-ranging intellectual competence for problem solving. Sixth, effective leaders need to be powerful motivators of people. The seventh claim is that being an effective leader call for developed and accustomed conceptual skills, so that one can mark potential possibilities, analyse and express them, and roll them into future opportunities. The eighth version stresses effective leaders as having evolved sound judgement, concerning concentration to detail, conceptualisation, and intuition, all of which are attributes that do not easily co-exist. The

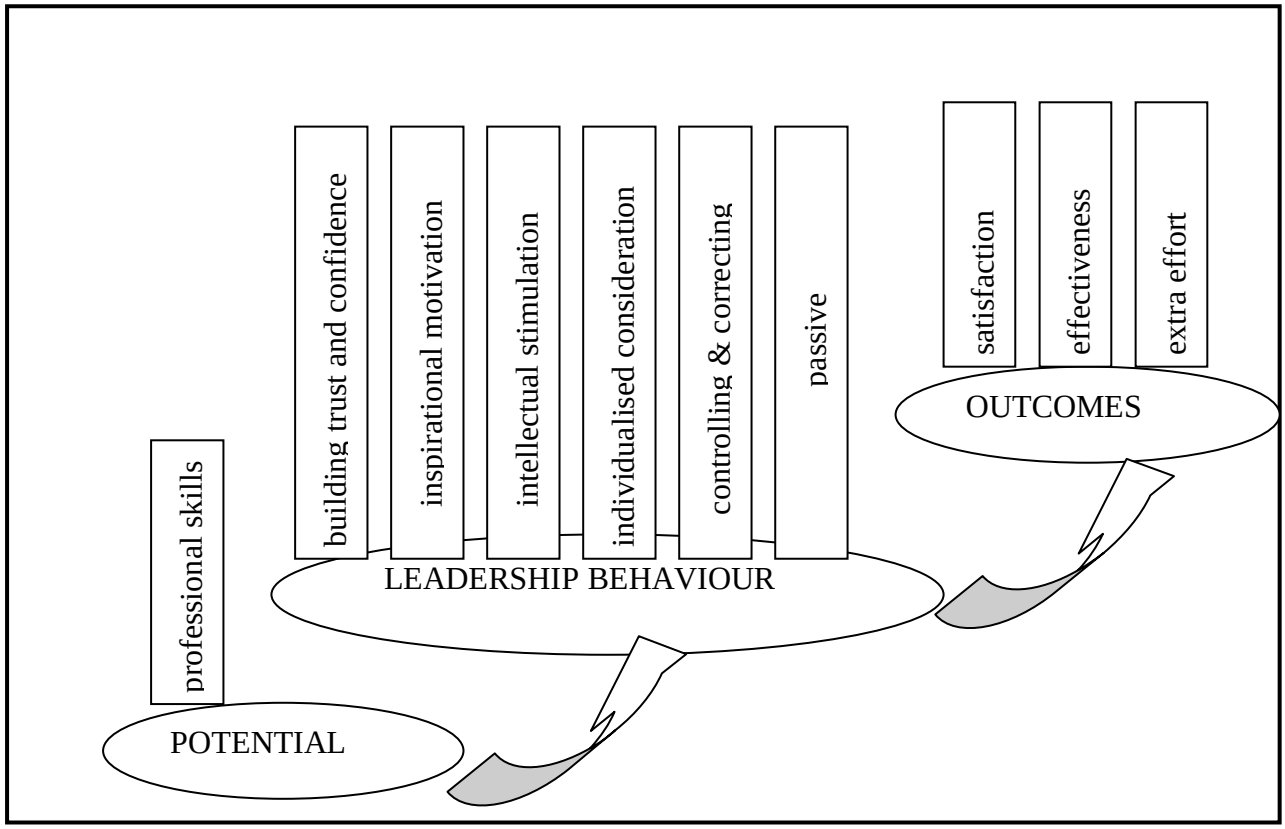
ninth says leadership demands the progress of key aspects of character and assessment aim with conscience, so that the individual can connect drive with the wish to be held fully in charge of his or her words and actions. According to the tenth interpretation effective leaders need to possess sufficient humility so as to foster the wisdom that will enable them to work their way through the ambiguities and paradoxes that they will inevitably face. (Kakabadse, 2003, p. 52)

Exceptional leaders aim towards controlled extroversion and have a great deal of physical energy. (Goleman 1998; Hogan, Curphy & Hogan, 1994, pp. 493-504) Most successful leaders also feel that they have control over the events in their lives - internality. (Kets de Vries, 2000) The new view of leadership in the LO centres is vital. Leaders are designers, stewards, and teachers responsible for building organisations where people continually expand their capabilities to understand complexity, clarify vision, and improve shared mental models. This means that leaders are responsible for learning. (Senge, 1990, p. 340) The leader's responsibility is to ensure that a sound planning process occurs, and thus the leader's role is to create a structure for planning, and to participate fully in the process. (Paris, 2003, pp. 9-10)

Leadership is connected to context and culture. Change is related to the reshaping of at least pragmatic values, and conceptually movement from the behaviourist concept of learning to the critical constructivist approach. The old paradigm of leadership describes how to lead, and the new paradigm of leadership describes how to learn to lead. (Nissinen, 2001, pp. 25-26) The new Deep Leadership Model (DLM) concept in military command attempts to move the emphasis of leadership from ordering and strict control of those orders to leadership, under which subordinates commit themselves to the task at hand. The DLM consists of the constructivist framework of leadership behaviour, and includes those dimensions that can be evaluated in a reliable manner with external

feedback. The structure of the DLM involves three main dimensions and 10 factors. (Nissinen, 2001, pp. 218-225) The DLM is shown in Figure 5.

Figure 5. The Deep Leadership Model (DLM) (Nissinen, 2001, p. 219).



The DLM explores leadership behaviour with three dimensions that are deep leadership, controlling & correcting leadership, and passive leadership. Building trust and confidence, inspirational motivation, intellectual stimulation, and individualised consideration are four cornerstones of the deep leadership.

Professional skills involve knowledge and practical skills required by a leader in his assignment and they are only one part of the potential of a leader. (Nissinen, 2001, p. 220) The leader receiving

feedback must in his own development process become aware of the demands presented by the feedback on the reviewing of his values and attitudes. (Malmivuori, 2001, pp. 139-149)

From the main factors of deep leadership building trust and confidence offers a behavioural model to the subordinates. Trust is built by putting the needs of their subordinates above his or her own needs and that risks are considered as shared. The ethical and moral basis is strong and it emphasises honesty, fairness and impartiality. Thus, the deep leader rarely uses his or her legitimate power only and never does so to seek his own advantage. With inspirational motivation from the leader gets the subordinates find new meaning, new features and challenges in their work. Subordinates are included in goal visioning and confidence in the future coupled with optimism strengthens their ability to function. Intellectual stimulation encourages creativity and supports innovation. The leader shows this by questioning the basic assumptions, by seeking new possible solutions to problems and by showing new approaches to work. Individualised consideration shows the positive conception of people, genuine interest in subordinates as human beings. In the end the leader is a coach with individual interaction, recognising the individual's needs and developing growth while also accepting individual differences. (Nissinen, 2001, pp. 219-222)

Leadership is a process that has constructive change as its role, while management is considered a process responsible of achieving results in key sectors. Leadership usually includes a vision and a strategy to achieve that vision, both of which are communicated to people in an comprehensible manner so that they believe in it. Encouraging and motivating working conditions clear obstacles from their way towards the goal. Efficient leadership creates change benefiting the entire organisation. (Kotter, 1988, pp. 7-12; Senge, et al., 2002, pp. 65-68; Puolamäki, 2004, pp. 43-53)

Success in an open environment sets demands on an organisation's leadership culture. Changes in the defence establishment mean partially that more and more leaders have to meet the requirements of an open environment. An increase of expertise, structural changes, globalisation and the demand for social transparency are some of the elements in an open operating environment. (Krogars, 2000, pp. 25-26) It is also argued that leadership is a non-hierarchical concept; leaders can and should be found throughout organisations. Furthermore, a key leadership mission is the maintenance and modification of culture to an organisation's changing environment. Finally and consequently, the role of leaders is to be the embodiment of the organisation's culture. Their behaviour will be closely observed so as to see if they merely pay lip service to the key values of the culture or whether they practice them. (Goffee & Jones, 2000; 2003, p. 274) These ideas link this study's approach to the culture of the LO, and, hence, culture is analysed in the following paragraph.

Consequently, the definition of leadership concentrating on describing the significance of leadership in relation to organisational effectiveness (Kotter, 1988) is presented. Leadership can be understood as a personal issue using oneself influentially, persuasively, and representing organisational vision. Leadership is seen as an authority process that produces acceptance and commitment from the organisation's members to contribute to the organisation's effectiveness.

The use of the term the leadership instead of management, even though in Finnish they are both translated as "johtaminen", describes the development process of an organisation. As thus, development of an organisation is defined as the learning process of the individuals, groups, leaders, organisation and partners. Additionally, strategic level planning combines strategic leadership and a wide range security approach within the learning organisation. Despite military leadership levels (Nissinen, 2001), policy making at a political level is above the military. The DLM can also be criticised for including control and correction with passive leadership in the structure, which should

not be a part of the model. There may be alternatives for the model, but not for parts of it, and they may even be considered as non-leadership. Additionally, satisfaction with outcomes is an idealistic hypothesis, because on the basis of personal experience this is not at all the case. Many things other than leadership may influence satisfaction, and by itself, satisfaction is thus not necessarily a direct consequence of either good or bad leadership. It is especially unclear whether or not satisfaction should be achieved at every level of the organisation, because new developments and critical awareness of them typically cause dissatisfaction at the very beginning of the process of change. Additionally, the theoretical connection of the DLM to constructivism is unclear, as was mentioned in chapter 1.3. Instead of a constructivist approach, the context of *social constructionism* (Rohmann, 2000, 363-364) could be more suitable to the DLM. The DLM is used as a foundation for modelling the leadership of security in chapter 7, because the DLM: being used in the Finnish Defence Forces (FDF); based on the constructivist approach; developed through the scientific process; empirically tested and developed; having international relevance; expanded outside of the military to both the public and private sectors in Finland, is useful both at the strategic and the operational levels.

2.3 The concept of culture

Culture is a complex concept and because it is sometimes too elusive for stressed employees to grasp there is a need to develop a framework for the analysis of organisational culture. This framework is based on the view that shared values, attitudes, behaviour, and assumptions are shaped by different sets of organisational relationships. Consequently, mainly from the classical sociological literature, a response has emerged to the widespread division of work associated with the emer-

gence of modern societies, and so, the key concepts are those of sociability and solidarity. (Goffee & Jones, 2003, p. 274)

An organisation's culture is defined as including those habitual, taken-for-granted assumptions about how things get done around the workplace, which is the single most sustainable sources of competitive advantage. (Goffee & Jones, 1998.) "Culture is the collective expression of human needs and actions, so it sits like a landscape over the bedrock of our psychology" (Sperber, 1996). Organisational culture is the most stable and deepest structure of the environment. Structural reforms do not necessarily lead to a designed result if the ways of thinking of the people working in an organisation and the functioning culture do not change (Schein, 1992, pp. 211-213).

The communal culture is seen where innovation requires extensive and multifaceted working as a team across functions and locations. Teamwork is geared towards achieving quantifiable synergies and possibilities across organisational sub-units. Strategies are long-term and developing rather than the amount of assessable stages. In the communal culture the environment is energetic and complex, requiring many interfaces with the setting and a higher ability for internal organisational information processing. (Goffee & Jones, 2003, pp. 280-282)

In the organisational cultural context sociality refers, above all, to affective relations between individuals, who are likely to see one another as friends. Thus, individuals tend to share certain ideas, attitudes, interests, and values and are inclined to associate on equal terms. In essence, sociability represents a type of social interaction, which is valued for its own sake, and it is typically maintained through ongoing, face-to-face relations characterised by high levels of implicit reciprocity. There are no pre-arranged "deals" and individuals help each other "with no strings attached". (Goffee & Jones, 2003, p. 275) Solidarity, in contrast to sociability, describes task-focused, mission-

oriented co-operation between individuals and groups, but it does not necessarily depend upon close friendship or even personal acquaintance, nor do continuous social relations necessarily sustain it. Solidarity is displayed instrumentally and discontinuously, as when a perceived need arises. By contrast to sociability, solidarity expression is both intermittent and contingent. (Goffee & Jones, 2003, p. 275)

Many victoriously fast-growing organisations have been built in the order of a communal culture. Such cultures may be prone to what is identified as the "paradox of success" meaning the tendency to carry on with behaviours even when they cease to be suitable to the context. (Audia, Locke & Smith, 2000, pp. 837-853) Promoting a *learning culture* in an organisation entails the approval of a new form of leadership, which raises intangible resources such as willingness to collaborate in sharing knowledge throughout the organisation. This has to be forwarded in the course of winning people's commitment rather than the mere establishment of structures. (Nyhan, et al., 2003, p. 71)

Concept of culture has two misconceptions. The first is thinking that there are correct cultures, because there are only appropriate cultures. This means that no generically correct culture exists, only such ones that are suited to the particular environment of a business and to the complexity of its set of values. The second, is believing that organisations on their own can develop certain cultural characteristics, because if that were the case then an organisation's success would be assured. (Goffee & Jones, 2003, p. 274)

In spite realism in fragmented organisational culture in some contexts, the communal organisation may be viewed as idealistic. This is because solidarity alone constructs a very instrumental organisational orientation. Co-operation may be engaged the very instant when it is not potential for participants to identify the communal advantages. On the contrary, organisations that are characterised

foremost by sociability may lose their logic or reason. Critics emphasise organisations' capability to be overly tolerant of poor performance and probably content with it, and thus, the communal organisation has much to improve. The idealistic approach shapes the narrative on innovative, high-performance learning organisations. Idealistically, it is seen as the culture at the core of the success of the LO, because it is strictly connected to the leadership of the organisation, to the performance of the organisation, to the development of the organisation and to the productivity of the organisation. Consequently, culture is a key pillar in the LO and in this study process, too.

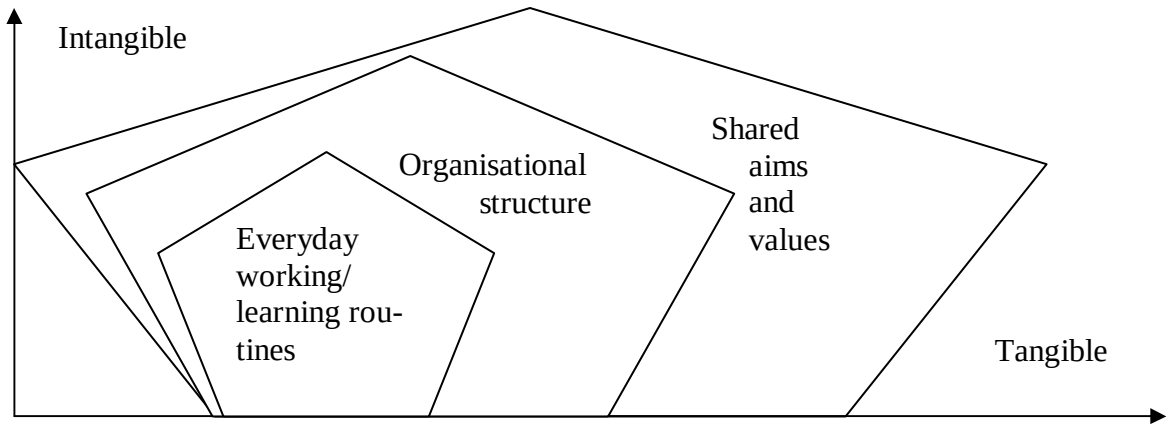
However, the learning culture may be an unachievable goal for many organisations. Those attaining the learning form often find it too complex to sustain due to a number of probable explanations. High levels of solidarity are often created around owner-founders or leaders. The learning culture may be hard to sustain in the condition of expansion, diversification, and internationalisation. A fundamental anxiety may exist between the relationships of culture that makes the common corporation essentially uneven, and in effect, friendships can weaken effective efficiency or vice versa.

2.4 Challenges for the learning organisation

The thinking around the learning organisation (LO) in Europe has developed towards a European social model focusing on educational and humanistic dimensions. The intention is to create competitive activities by enabling organisations to become more effective and to enable members of organisations to find meaning in what they are doing. Allowing individuals to gain benefits and to enhance the quality of people's learning also creates competitive activities. The LO must constantly be sustained through developmental processes involving all parts of an organisation and its partners, because it is socially constructed.

The LO, as the emerging paradigm, is criticised from the rapid miracle perspective. This criticism includes the thinking of leaders that believe following a programmed formula is all they have to do. (Brown & Keep, 2003) The reality is, however, different because leaders need to build a vision for an organisation, which is based on commonly accepted aims, shared meanings and values and to take into consideration the contextual environment supporting the sense of organisational identity both within and outside the organisation. The task of the leader is to provide a learning space, a context for the necessarily repeated reinterpretation of goals so that structures can become accustomed to the space. However, there is a risk that leaders' focus shift from one externally proposed structural change to another in a hopeless attempt to get better competence. (Kotter, 1988) Implementation of change and learning in an organisation is diagrammed in three levels in Figure 6.

Figure 6. Three interdependent levels at which learning must take place to implement organisational learning (Nyhan, et al., 2003, p. 47).



Simplifying the mission of constructing the LO through devising normative formulas does not respect the concept. Actually, they harm the implementation of its formation because there are no easy theoretical or pragmatic resolutions. Organisational learning raises a complexity, which re-

flects the realism of an organisation that is not agreeable to change. The competitiveness and efficiency of an organisation is closely determined by a multidimensional network of contextual influences, with a mix of the old and the new, of harmony and the uneven.

The LO's collective body of knowledge has nearly everyone's contribution in the organisation, because this knowledge comprises the collective thinking of all persons who have created it, or who are sustaining it. This culture forms a collective mindset. The LO attempts to deal with social objectives in a balanced way by catering to the needs of different interests within an organisation, where the balance has to be created between the interests of the individuals and the interests of the organisation. A "both/and" strategy for leaders is that they must notice the informal, intangible and subjective dimensions in an organisation as well as the formal, tangible and objective aspects.

Critics (Nyhan, et al., 2003, p. 12) view the learning organisation as being embedded in a dogmatic business-school management concept that is founded on unsympathetic economic principles of organisational value. They criticise the use of cultural and psychological theories for modern management to maximise reimbursement. Management is not interested in ensuring individual learning profit for the members of the organisation. Nyhan, et al. (2003, p. 12) toughens this criticism into a sense of being let down by the non-fulfilment of the positive forecasts concerning the emergence of more human-centred organisation that would improve the quality of life for everybody. They indicate that the reality for many people is a rebirth of the old culture possibly masked in the form of "lean-production" or "flexible working". (Nyhan, et al., 2003, p. 12) The LO approach is also criticised by claiming that the supporters build a vision-based or a holistic learning organisation.

> "This group is neither a group of tested theories nor self-evident empirical results, and the ideas categorized in this group seem to be more idealistic than realistic because of their broadness and their holistic aim. It is hard to prove that these types of learning

organisations exist, but it does not decrease the value of the thoughts categorized into this group" (Moilanen, 2001a, 16).

Extreme critics (Sennett, 1998) regard it as being nothing more than an effort by management to deceive people into becoming "organisational men and women". For these it is a discredited concept and merely a controlling device (Sennett, 1998). This aspect is related to a sense of disappointment for not being allowed to create more autonomy and freedom of performance. It is also forecasted of being used as a tool for the introduction of new types of control.

Some critics reject the learning organisation concept as nothing more than a de-contextualised theory, which has been popularised in management literature as a recipe for immediate success (Fisher, 2003). There may also be critics from whom the lack of evidence of examples of organisations in an empirical confirmable manner (Fischer, 2003) and the execution of learning organisation theory is cited as a motive for discrediting the conceptual validity or usefulness of the concept (Cressey & Kelleher, 2003). Despite the arguments about the validity of the learning organisation concept, it is seen to be out of date with regards to the interest in it and it is being replaced by theories of knowledge management (Brown & Keep 2003). The LO paradigm may be argued to be such a holistic concept that it "can easily remain at the level of a good guess or, then, become a valuable construct" (Moilanen, 2001a). The learning organisation needs to be some kind of a systematic whole.

Organisational human sustainability is the involvement of the organisation in developing the capabilities of its workforce members, employees, creating a just, equitable, and healthy workplace. Those members who have some stake in the future of the organisation contributes to the welfare of the outside neighbourhood. Organisational performance, rather than job security or work satisfaction, has become the central drive of organisation change agents. The new challenge for change

agents is to make available organisation leaders with a design for the way forward as we redesign organisations for the 21st century. As a change agent an organisation leader explores the possible of sustainable practices for improving organisational performance, construction of human capability, and contributing to society development. This is the new task for change agents; to help reshape the organisation to attain outstanding performance that in fact contributes to the execution of human needs on a healthy globe.

Creating the paradigm of leadership inside an organisation means educating leaders who learn locally, but act globally. From this perspective, it is not so easy to separate the organisation mind and bulk extended out over the globe. However, most organisations need to pursue both horizontal and vertical synergies; therein lays the paradox. In spite of this paradox, this wide range approach is useful in the strategic security modelling procedure, because these are the features met in critical security, strategic planning and learning organisation aspects. Consequently strategic planning is analysed in chapter 3 and critical security is presented in chapter 4.

3 STRATEGIC PLANNING IN THE MOD

This chapter reviews aspects on strategic planning. A variety of perspectives, models and approaches are applied in strategic planning, but in this study it is considered from the framework of the learning organisation (LO). *Strategic planning* might be started by articulating the organisation's vision and values and then by planning how to achieve the vision while adhering to those values. Some plans are scoped for one year, many from five to ten years into the future. Some plans include only top-level information and no action plans. (McNamara, 1999)

The need for strategic thinking has been increasing in the public sector, because more and more customer service and qualitative aspects have been required. Domestic and international, public, private and non-profit, and educational and economic policies are examples of formerly distinct arenas that are now very much interconnected (Bryson, 1988). The blurring of these distinctions means that although many organisations and institutions are involved, no one is fully in charge. These findings emphasise strategic thinking from a cluster perspective as never before.

The way a strategic plan is developed depends on the nature of the organisation's leadership, culture of the organisation, complexity of the organisation's environment, size of the organisation, and, for example, on the expertise of planners. Strategic planning models (Niven 2003; Paris 2003) may include goal-based (McNamara, 1999), issue-based (McNamara, 1999), organic, and scenario, even though scenario planning (Krogars, 1998b) is more a technique than a model. Goal-based planning

(McNamara, 1999) is probably the most common one and starts by focusing on the organisation's mission, vision and/or values, goals which function toward the mission, strategies by which to achieve the goals, and action planning in the meaning of who will do what and by when. Issue-based strategic planning (McNamara, 1999) often starts by examining issues facing the organisation, strategies to address those issues, and action plans.

One of the major reasons for going through a planning process is to help focus the efforts of an organisation. In *a representative democracy model* (Krogars, 1998b; Mintzberg, 1994) everyone can participate in some phase of the process of planning even though every individual in an organisation cannot participate in every phase of the planning process. In this model a sample of personnel selected to represent the whole group is charged with developing the strategic plan. In strategic planning it is constructive to prioritise strategic directions and goals on an annual basis, focusing first on the actions that tend to drive the others, because there may be a lot of interactivity among them. Strategic planning requires a willingness to focus resources, and thus it is unlikely that an organisation would continue doing everything it had done in the past in the same way if the organisation was serious about planning strategically. The core in the model is the strategic vision of the organisation. All perspectives must support the strategic vision, and each perspective relates to the others through the central vision driving the organisation.

3.1 The concept of strategic planning

Strategy is a “plan”, which includes the concept or the idea of how the organisation aims to achieve its goals. (Kuitunen, Ilomäki, Simons & Valjakka, 2003, p. 47) Planning, in the English language, is understood to mean: an action or process of an idea; or a method that has been thought about in

detail in advance; or an outlined drawing of a structure, showing the position and size of the various parts in relation to each other. (Crowther, Kavangh & Ashby, 1999, p. 881) "Planning is a formalised procedure to produce an articulated result, in the form of an integrated system of decisions" (Mintzberg, 1994, p. 12). This approach links the strategy of the MOD to this study. A comprehensive definition of *strategy* is defined:

> "strategy determines and reveals the organisational purpose in terms of long-term objectives, action programs, and resource allocation priorities; selects the businesses the organisation is in, or is to be in; attempts to achieve a long-term sustainable advantage in each of its businesses by responding appropriately to the opportunities and threats in the firm's environment, and the strengths and weaknesses of the organisation; identifies the distinct managerial tasks at the corporate, business, and functional levels; is a coherent, unifying, and integrative pattern of decisions; defines the nature of the economic and non-economic contributions it intends to make its stakeholders; is an expression of the strategic intent of the organisation; is aimed at developing and nurturing the core competencies of the firm; is a means for investing selectively in tangible and intangible resources to develop the capabilities that assure a sustainable competitive advantage" (Hax & Majluf, 1996, p. 14).

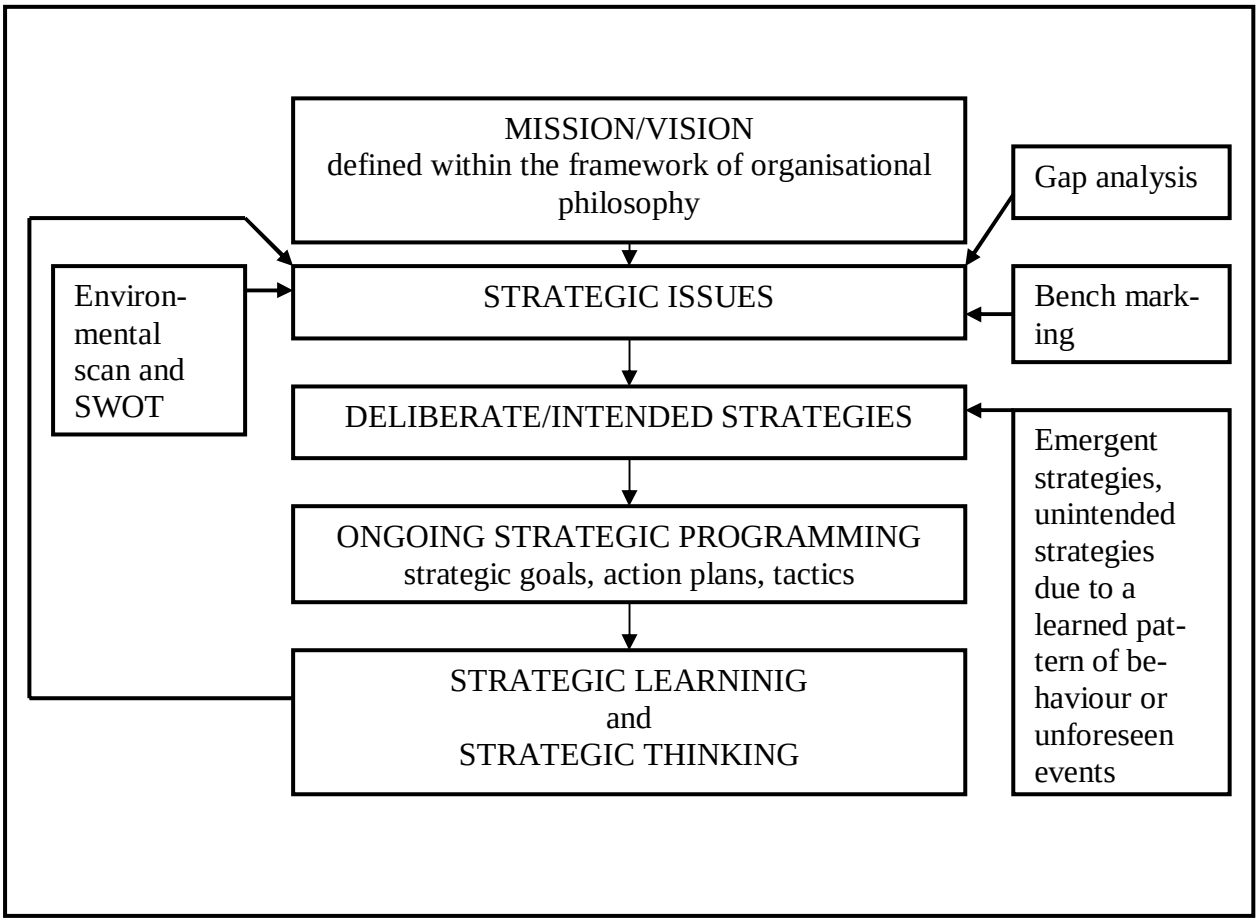
The concept of strategy is generally understood to mean a plan designed for a particular purpose, or the process of planning something. It has been also used in the meaning of carrying out a plan in a skilful manner. The concept of strategy is especially connected to the military in the meaning of the art of planning and directing military activity in a battle or war. (Krogars, 1998, p. 30)

Strategic planning is a structured approach to anticipating the future and "exploiting the inevitable" (Paris, 2003, p. 1). The strategic plan should chart the broad course for the entire institution for the

next five years, and it is a process for ensuring that the budget follows the plan rather than vice versa. A strategic plan can guide retrenchment and reallocation, thus strategic planning is not just a plan for growth and expansion. (Koivisto, 2004, pp. 57-61; Paris, 2003, p. 1)

Strategic planning may also be defined as an ongoing non-stop learning process; and an organisational discourse extending beyond attaining a set of predetermined goals; aiming to change the way an organisation thinks and operates; and creating a learning organisation. (Lerner, 1999) Consequently, an argument may arise that no organisation can remain static for long. (Paris, 2003, pp. 2-4) Learning may be connected to the strategic planning process as showed in Figure 7. This educational interpretation on defining strategic planning is a challenging effort in the traditionally oriented defence establishment ruled by military strategists and social politicians.

Figure 7. The strategic planning process model (Lerner, 1999).



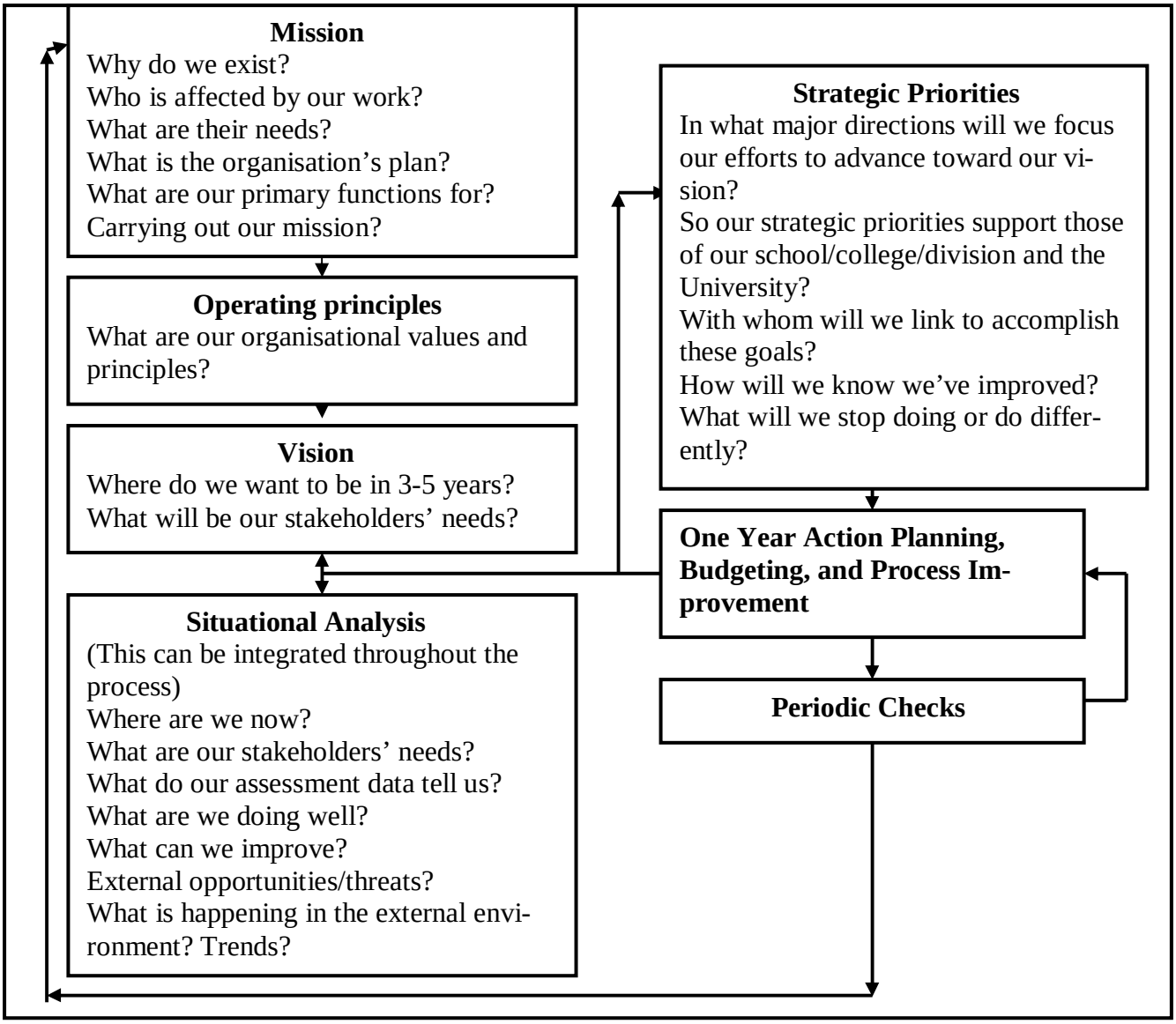
A *prescriptive school* of thought divides strategy formation into three groups: design, planning and analytical. (Mintzberg, 1994) *The design school* is known for its SWOT tool, identifying internal strengths (S) and weaknesses (W), and external opportunities (O) and threats (T). (Mintzberg, 1990, 1994; Mintzberg & Lampel, 1999) The *planning school* allocates most of the design school's grounds, but relies more on formal procedures of planning and concentrates more on the process than on the substance of strategies. (Ansoff, 1988) The *analytical school* known as the positioning school emphasises the content of the strategies typically using matrices. (Porter, 1980) Krogars (1998a, 1998b, 2000) has analysed strategic change and leadership in the Finnish defence establishment. There must be more and more networking between the Finnish defence establishment and other international and national organisations. These results get support from the research conducted by Krogars and Ojala (1999).

In strategic planning the group strives for consensus beginning with individuals, small groups, and then with a cluster as a whole. Philosophically this support is based on the individual belief that by supporting this option there is sufficient chance to express one's own opinion during conversations and thus, this alternative is the best one for us. A skilled facilitator can assist the group by refusing to conglomerate too many ideas. (Paris, 2003, p. 9; Sädevirta, 2004, pp. 116-118) "It is strategic thinking and acting that are important, not strategic planning" (Bryson, 1988, p. 2).

There are differences between strategic planning and *long-range planning*, because conventional planning tends to be oriented toward looking at challenges based on current understanding; or an inside-out mind-set; or tends to maintain the status quo over time. (Arnkil, Arnkil & Eriksson, 1998, pp. 214-242; Paris, 2003, pp. 4 – 5) Strategic planning is much more sensitive to the external envi-

ronment than long-range planning. The model in Figure 8 particularly relies on information from internal and external stakeholders regarding their needs, expectations and requirements as the foundation for planning. (McNamara, 1999; Paris, 2003, pp. 4 – 5) Strategic planning allows the organisation to focus on dynamic, continuous activities of self-analysis processes. (Lerner, 1999; Koivisto, 2004, pp. 57-61) The humanistic feature is also the focus of this study, and consequently the model in Figure 8 reflects optimistic confidence in intellectual synthesis where people of good will plan together in a given structure. The results are far superior to what any individual alone in the group could generate.

Figure 8. The strategic planning model (Paris, 2003, p. 3).



Strategic planning creates a broad decision-making group, which actively involves operational levels of management. (Sädevirta, 2004, pp. 116-118) The security strategic planning process is an integrated part of the holistic organisational strategic process. “Improving an organisation’s performance is not just a matter for top management” (Warren, 2003, p. 10). Being involved in the planning process contributes to employees’ commitment to mutual goals and a sense of organisational unity creating similarly external advocacy for the organisation. (Åberg, 1997, p. 47 and p. 153) From the information point of view strategic planning needs a human being, “a situation officer”, and between different organisations and different information contents common processes and knowledge structures are essential. (Kuusisto, 2004, pp. 99-110)

Five ingredients for an effective strategic planning process are: the right people, good data, preparation, a structured process, and adequate resources of time and economical resources. (Paris, 2003, p. 7) The strategic planning process includes the working processes of planning, documentation, experiencing and evaluation. (Kuitunen, et al., 2003, p. 47)

Strategic planning is the process of identifying common directions for the organisation, based on needs of the external and internal stakeholders, and in a quality environment, where all participants share some common understandings and commitments relative to what they wish to accomplish together for their stakeholders. However, this does not mean that entrepreneurial activity cannot take place, but it does mean that there is some minimal level of shared effort and some common directions. Greater collaboration can yield enormous benefits for the individuals in the organisation.

From the strategic leadership point of view strategic management may be summed up as *an incorporated management* (Koivisto, 2004, pp. 57-61) approach joining all the individual elements in-

volved in planning, implementing and controlling an organisation strategy. It demands an understanding of the long-term goals and objectives of the organisation, so to say where it wants to go. It needs a broad analysis of the current and future environment in which the organisation operate, so as to say where it is. The analysis contains all existing and potential internal operations and resources of the organisation, but equally importantly, aspects of its environment. One of the connections between strategic planning and continuous quality improvement is reliance on data as foundation for decision-making. On the other hand, strategic planning is more likely to result in a deliberate shift in direction, or refocusing of mission in light of changes, actual or anticipated. Strategic planning, however, is developed around a vision of success, or a vision of the desired future. Thus, this idealised word picture represents the best possible situation for the organisation and the plan helps to make this shared vision a reality. (Koivisto, 2004, pp. 57-61; Paris, 2003, pp. 4 – 5)

However, strategic planning has pitfalls containing false arguments, because, according to many studies, in many cases planning does not contribute to the commitment, plans do not promote change and plans are inflexible. Due to the fact that planning may be seen as a political process, not objective and neutral, planning supports the illusion of control. Assumptions about predetermination of the future, detachment of the strategy from operations, and formalisation of strategy processes are still prevailing mistaken beliefs. The fallacies are implemented by organisations when they use existing planning procedures by arguing that organisations engage in formal planning not to create strategies but to program the strategies they already have. Thus, the organisations formally elaborate and operationalise their consequences. (Mintzberg, 1994, p. 333).

Because of the external context the MOD is vigorously changing, including security aspects, and because strategic planning is more sensitive to the changes than long-range planning, this approach affords proper support to this research. Thus, strategic planning is applied in the MOD. Addition-

ally, the principle of strategic planning where the process is more important than the plan itself is similarly modified as one of the basic philosophies of modelling security in chapter 7. This chapter will certainly provoke debate in the traditionally oriented defence establishment ruled by military strategists and social politicians, due to the educational interpretation on defining strategic planning.

3.2 What is the Balanced Scorecard?

The *balanced scorecard (BSC)* (Kaplan & Norton, 1996) is a theory of strategy based on measurement and leadership. However, with a vague theoretical background it is more a tool or a model than a theory. (Anttila & Paavola, 1998) The MOD selected the BSC for its approach in strategic leadership for the development of efficiency of the organisation. The use of the BSC as a tool for strategic leadership in the ministries in Finland has been analysed, and it was found that the BSC has generated more concrete strategies and added several dimensions for the functions of the ministries, even though ministries are just in the beginning of the implementation of the BSC process (Kinnunen, 2000). However, the Finnish defence establishment does not have enough capabilities to begin to apply the BSC as a leadership tool for the whole organisation (Kangaste, 2002).

Strategy is at the core of the BSC system. *Strategy* is about the broad priorities an organisation plans to pursue in order to achieve its mission. (Kaplan & Norton, 1996, pp. 29 – 32; Niven, 2003, p. 2) This approach links both strategy and the BSC of the MOD to this study.

Strategic learning is the capacity for organisational learning at the executive level (Kaplan & Norton, 1996). This is seen as the most innovative aspect of the BSC, because strategic learning means

the use of the scorecard as a strategic management system (Kaplan & Norton, 1996, pp. 261 – 268). Thus the BSC is modified with strategic planning in this study.

BSC modelling provides an opportunity to evaluate the tasks of the MOD, and is also seen as a comprehensive approach with new effects on the organisation (Määttä & Ojala, 2000). Previously, strategic planning and the theory of the LO were combined (Salonen, 2002). The theory of the LO, strategic planning and critical security thinking are combined in this research.

The BSC is a tool to help an organisation and a leader translate strategy into action; it is a means to align the strategic actions and strategic plans by integrating it to the organisation's control system. (Puolamäki, 2004, p. 68) The BSC starts from the organisation's vision and strategies, where critical success factors are defined. Measures are constructed aiding target-setting and performance measurement in areas critical to the strategies. Hence, the BSC is a performance measurement system, derived from vision and strategy, and reflecting the important aspects of the business. The BSC concept supports strategic planning by federating the actions of all parts of an organisation around a common understanding of its goals, and by facilitating the assessment and upgrading of strategy. (Kaplan & Norton, 1996, pp. 1-20; Niven, 2003, pp. 1-4) The real power of the BSC is transforming from a measurement to a management system. (Kaplan & Norton, 1996, pp. 1-20)

The BSC recommends broadening the measures to include four different perspectives: 1) Financial perspective, how do we perceive our shareholders? How is our financial performance? 2) Customer perspective, how do we perceive our customers? How do we monitor our customer knowledge? 3) Process perspective, in what processes should we excel to succeed? How do perform our internal business processes? and 4) Learning and innovation perspective, how will we sustain our ability to change and improve? How do we provide learning and growth? (Kaplan & Norton, 1996, pp. 1 - 20; Niven, 2003, pp. 1 - 4)

The BSC is a very useful tool for target setting and performance follow-up for government organisations (Koistinen, 2002). Consequently, there is a modification of the generic BSC model for central government organisation levels, from the ministry and its departments to agencies and local offices or local government units (Koistinen, 2002). This study emphasises potential government–specific adaptations of the BSC, because the study's object is the MOD, as a part of the Government and its status in the public sector.

> "Usually the government organisations tend to prefer operational excellence strategy. This means that the BSCs are often used as critical success factor scorecards for monitoring the operations in a balanced way. Strategy maps for government organisations are similar to strategy maps for private companies with the difference of having impact to the community as the final goal of financial results" (Koistinen 2002).

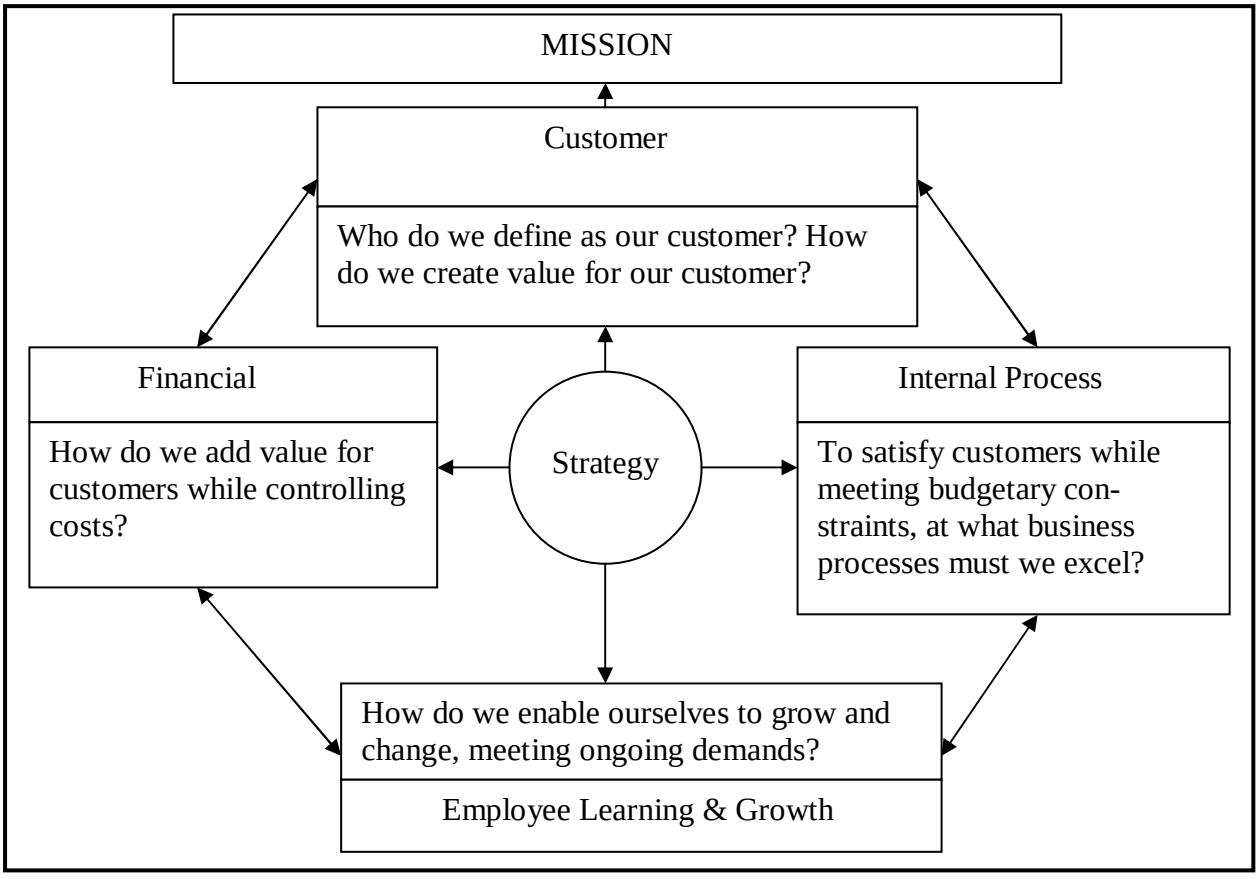
In the profit model all of the measures appearing on the BSC should lead to improved bottom line performance, and improving shareholder value is the end game (Kaplan, 2002). An organisation, such as, the MOD exists to serve a higher purpose, for example: "increasing public safety and security" (Niven, 2003, pp. 1-2). A public actor will not necessarily achieve its mission overnight, and in fact may see only periodic movement, thus the other perspectives of the BSC are so vital. Monitoring performance, and learning from the results, in the customer, internal process, employee learning and growth, and financial perspectives will provide an organisation with the short to medium term information required to guide an organisation ever closer to achievement of the mission. (Kaplan & Norton, 1996, p. 21; Niven, 2003, p. 2)

Impact perspective presents the results of a government organisation, and this is comparable to the financial results of the private sector (Koistinen, 2002). The "customer" perspective may include

several different stakeholders, for example, citizens or other government organisations, depending on the operations of the government organisation. (Kaplan & Norton, 1996, pp. 26 – 28; Kaplan, 2002; Niven, 2003, p. 3) Organisational learning and growth come from three sources. These sources are people, systems, and organisational procedures. Non-profit and public sector agencies operate as mission-based organisations. Thus, they rely heavily on the skills, dedication, and alignment of their staff to achieve their socially important goals. (Kaplan & Norton, 1996, pp. 28-29; Niven, 2003, p. 3)

Figure 9 displays a general example of the BSC model, which is applicable to public and non-profit enterprises. This diagram is useful to differentiate private and public or non-profit sector use of the BSC.

Figure 9. The Balanced Scorecard for the Public and Non-profit Sectors (Niven, 2003, p. 1).



Critical success factors (CSF) of government organisations are quite similar to the private sector: (a) the personnel perspective: innovation, motivation, employee skills, staffing levels and co-operation meaning cross-government, international, private sector; (b) the processes perspective: productivity and cost-efficiency; (c) the customer perspective: customer orientation, customer satisfaction, and awareness among citizens; and (d) the impact perspective: fulfilling mandates as a direct impact and positive effect on the community as an indirect impact. (Kaplan & Norton, 1996, pp. 147-166 and pp. 306-307; Lumijärvi, 1999, p. 12; Lumijärvi & Jylhäsaari, 1999, p. 240; Määttä & Ojala, 1999, p. 53; Olve, Roy & Wetter, 1998, p. 225)

3.3 Differences of the BSC and Total Quality Management

The BSC is often mixed with *total quality management (TQM*) (Franz, 2003). However, clear differences exist, but when implemented together they can develop the performance of the organisation. *Quality* may be defined "as meeting the needs and exceeding the expectations of stakeholders" (Paris, 2003, p. 10). Quality circles have succeeded as a part of a broader change in managerial-employee relationships, meaning focusing on meeting customer needs, stabilising production rates and sharing benefits with valued suppliers. (Senge, 1999, pp. 99-102; Senge, et al., 2002, p. 453)

TQM is "a theory of learning linked to a quest for quality" (Franz, 2003). TQM defines an organisation from the moment its raw materials arrive to the moment its finished products leave the premises. The European Foundation for the Quality Management (EFQM) Excellence Model is a non-prescriptive of the TQM framework based on nine criteria. Five of these are "Enablers" and four are "Results". The "Enabler" criteria cover what an organisation does. The "Results" criteria cover

what an organisation achieves. “Results” are caused by “Enablers” and feedback from “Results” help to improve “Enablers”. (EFQM TQM, 2004a)

The EFQM Model is a non-prescriptive framework, which recognises that there are many approaches to achieve sustainable excellence, and thus the concepts that underpin the EFQM Model are: (1) Results orientation: achieving results that delight all the organisation’s stakeholders; (2) Customer focus: creating sustainable customer value; (3) Leadership and constancy of purpose: visionary and inspirational leadership, coupled with constancy of purpose; (4) Management by processes and facts: managing the organisation through a set of interdependent and interrelated systems, processes and facts; (5) People development and involvement: maximising the contribution of employees through their development and involvement; (6) Continuous learning, innovation and improvement: challenging the status quo and effecting change by using learning to create innovation and improvement opportunities: (7) Partnership development: developing and maintaining value-adding partnerships; (8) Corporate social responsibility: exceeding the minimum regulatory framework in which the organisation operates and to strive to understand and respond to the expectations of their stakeholders in society. (EFQM TQM, 2004a)

The EFQM Model’s keys in four self-assessments are: (i) as a framework which organisations can use to help them develop their vision and goals for the future in a tangible, measurable way; (ii) as a framework which organisations can use to help them identify and understand the systemic nature of their business, the key linkages and cause and effect relationships; (iii) as the basis for the European Quality Award (EQA), a process which allows Europe to recognise its most successful organisations and promote them as role models of Excellence for others to learn from; (iv) as a diagnostic tool for assessing the current health of the organisation. Through this process an organisation is bet-

ter able to balance its priorities, allocate recourses and generate realistic business plans. (EFQM TQM, 2004b)

Implemented together, strategic planning and continuous quality improvement can dramatically improve the ability of the organisation to meet the needs of its internal and external stakeholders. (Paris, 2003, p. 11) It is significant that basically all strategic planning models begin with reviewing, refining or creating the mission statement based on stakeholders and their needs; the mission statement that becomes the foundation upon which all subsequent planning builds. Self-evaluation of the strategic planning process can be done by various methodologies in an organisation about the strategic and annual planning process. However, it is important to notice that the BSC is directed to the future, but the EFQM as a quality model measures the existing situation. These two measurement tools have different bases, but when simultaneously used they support each other.

3.4 Evaluation of the Balanced Scorecard

The introduction of the BSC in the defence establishment is a strategic level change that requires controlled change in leadership and the creation of preconditions for its successful introduction. The possible move to process management together with the redefined strategy processes and the goals of development brought forward in the strategies of both the MOD and the FDF will lower the threshold for the future introduction of the BSC in the whole defence establishment. The BSC provides the leadership system for organisations to invest in the long-term; in customers, in employees, in new product development, and in systems, rather than managing the bottom line to pump up short-term earnings. The BSC will change the way to measure and manage performance. Simply through interpretation of the results of the measurement an organisation is able to claim any real

difference in the lives or circumstances of its constituents. Particularly public sector organisations may easily be hesitant to air lofty objectives, for example: “increasing public safety and security” on the BSC’s claims. Especially employee learning and growth perspective is the driver of the BSC to the government administration (Määttä & Ojala, 2000). Even though the BSC is multidimensional its basic idea is simple enough. The importance of the degree of knowledge and skilfulness of the personnel has increased due to the knowledge-management of the expert organisations thus supporting the implementation and introduction of the BSC.

The BSC in government organisation shows many benefits: improved effectiveness and efficiency, transparency of government operations, customer focus in government operations, and personnel’s commitment to the organisation’s objectives. The BSC helps to reveal the essentials data from the vast amount of information the organisation’s information technology systems produces. (Koistinen, 2002) The benefits of applying the BSC can be summarized at all levels of an organisation as follows: (1) The BSC helps align key performance measures with strategy; (2) The BSC provides management with a comprehensive picture of business operations; (3) The methodology facilitates communication and understanding of business goals and strategies; and (4) The BSC concept provides strategic feedback and learning. (Koistinen, 2002; Puolamäki, 2004, p. 68; QPR, 2004)

The risks of the BSC should be recognised, because an organisation tends to get what it measures for and since people will work to achieve the explicit targets which are set (Kaplan & Norton, 1996). Even so, people will work to achieve their BSC goals, and may ignore important things; or, if the BSC is not revitalised often enough, what looked like an important goal in the beginning of the year may not be very relevant today. An important point about the BSC is the lack of a relationship to the variety of provider report cards that are being promulgated by third party players. (Kaplan & Norton, 1996) Additional risks that the BSC includes may be argued to be that the commit-

ment of the top management is not strong enough, huge amounts of data are collected, short term and day-to-day metrics are overemphasised, an organisation chooses the wrong measures, an organisation sets unrealistic goals, the data to be measured is difficult to collect, an organisation lacks communication, the BSC as a change agent raises an enormous amount of resistance, the change is performed too slowly and an organisation may have too many overlapping systems. The BSC may be seen to increase inequality in an organisation's performance, when it is not used in its every sector. From the individual's point of view the BSC may seem difficult, and difficulties may also occur with the language used and, thus, the entire issue should be explained clearly to people.

Management by results and control of the holistic spectrum of the defence establishment has been challenging. The result evaluation shows that the management is fragmented, and focus on single project implementation and statutory task performance. The most challenging aspects of management by results in the defence establishment are the lack of strategic management, the lack of the relationship between long term planning and short time goal setting, and fragmented single subject management. Management challenges at the sub-organisation level are the insufficient delegation of the power of decision-making and the small of amount feedback used in decision-making and management. To fulfil the above-mentioned shortcomings the defence establishment, as a part of the state administration, has launched process management projects and implemented the BSC thinking besides management by results. The MOD is one of the first pilot organisations in the Finnish public sector to use the BSC. (Määttä & Ojala, 1999) The reason why the BSC is a part of this study is: to reflect the research results from the perspective of the BSC so as to support the overall development direction of the MOD.

These perspectives of the BSC public adaptation make it relevant for this study, and add to the value of this study. The perspective of the importance of strategy links the BSC to the strategic

planning philosophy. Additionally, the decision made in the MOD to be one of the first pilot organisations in Finland's state administration gives an even more important role to this study, because these findings can be used in developing the BSC to meet the needs of the administration, and evaluate the progress in the MOD. According to Varjonen (1999) and Kangaste (2002, p. 120-121) the BSC basic assumptions of management do not essentially differ from the organisational culture currently prevailing in the defence establishment and thus, no major problems and borderline criteria are present for the introduction of the BSC.

However, the basic assumptions of the BSC differ significantly from those of the defence establishment's organisation culture. The greatest borderline criteria have to do with the individual's position in the organisation, the decision-making process, people's involvement, the organisation's relationship to power, and attitudes toward change and environmental changes. Because of these things the successful introduction of the BSC requires controlled leadership of change that has influence on all levels of the organisation, and especially on the inner levels of the basic assumptions.

The BSC way of processing things may be new and meet with resistance because it differs from leader-lead decision making. Some organisations have found the BSC to be too abstract and thus difficult to understand. Commitment may be difficult if only a few people in an organisation participate in the process. Also, all new trends, which the BSC may be seen as, and –isms may cause a frustration because there are so many of those. One problem for the BSC is that it is not possible to copy it straight from one organisation to another, not even within departments in the same organisation. On the other hand, this may also be seen an advantage, because then every organisation, including the MOD, needs to establish its own BSC.

As tactics are described, the data collected in the BSC reflects the organisation's progress toward achieving the delineated goals. Security should be a part of this process, not a separate one. Additionally, the BSC also is a supportive tool for implementing strategic security, especially as this study understands strategy in the meaning of learning by the executive top leaders in the organisation. The framework of strategic control expands the traditional concepts of diagnostic control systems to the usage of interactive, beliefs and boundary systems.

The learning and growth perspective of the BSC is the most important perspective in this study, because the educational approach is social in the LO. This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In the LO, people, the only repository of knowledge, are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Government agencies often find themselves unable to hire new technical workers and at the same time are showing a decline in the training of existing employees. This is a leading indicator of "brain drain" that must be reversed. Metrics can be put into place to guide managers in focusing training funds where they can help the most. In any case, learning and growth constitute the essential foundation for the success of any organisation.

3.5 Cluster combines knowledge

Many of the features previously described implement aspects in an organisation that are limited together, so to be successful with this kind of interaction between different aspects they must include both co-operation and competition at the same time. One solution for this kind of situation is to study a system where participants achieve advantages in co-operation, where cluster is a possibil-

ity due to its flexible and fluently renewing qualitative development trend. *Cluster* means a number of things of the same kind growing closely together; or a close group of people, animals or things. (Crowther, Kavangh & Ashby, 1999, p. 213) Security may form a cluster round information or security may surround information closely. In this study cluster is understood to combine knowledge. (Krogars, 2001, pp. 34)

Cluster is a number of organisations close to each other operating in the same area; in interaction they both compete and co-operate with each other. Interaction implements applicable advantages for all of the participants. Cluster features make possible the renewal of the resources used and qualitative development. The combining power and its strength vary and all participants in interaction do not necessarily share the idea of the holistic entity. (Javanainen, 2003, p. 6; Porter, 1990)

Clusters may be understood as networks of networks, which affect their hierarchical implementation. (Paija, 1999, pp. 10-11) The networks of networks cluster approach is used in practice when systematically network co-operation between regional firms and communal authorities have been developed (Javanainen, 2003, pp. 4-10). Cluster discursion especially emphasises the clusters as the basis of long-term competitiveness and knowledge greater of organisations (Kässi, 1996, p. 246). A typical feature of clusters is their ability to live in close connection with their environment, which leads to developing a time framework (Mannermaa, 1999, pp. 166-178). At state level administration this means pro-activity of the society to fulfil and ensure the needs of citizens, and thus the state can be considered to consist of one cluster. The changing environment challenge in existing knowledge paradigms and the ability and willingness to share common knowledge are always basic dimensions of developing a cluster in security administration. This emphasises the operational and structural flexibility of the clusters. (Krogars, 2000, pp. 35-37)

Cluster is vision oriented with clear goals, an operational plan for action, and a systematic feedback system. The aim is sharing, exchanging and delivering knowledge and capabilities between cluster partners and thus increase knowledge, competitiveness, and productivity. Cluster thinking emphasises the importance of co-education and co-training during the active action phase. (Javanainen, 2003, pp. 17-19) Cluster networks share a similar philosophical framework with learning organisation thinking. (Ojala, 1996, p. 133)

Cluster means a number of people or organisations operating closely together and their interaction includes both co-operation and competition with each other. All participants receive advantages; cluster is the flexible and fluently renewing qualitative development in the framework of the changing environment. Force combining participation varies and all members of the interaction do not necessarily share the idea of the holistic entity. These features are also typical for the conceptions of different sectors of security. Consequently, this approach makes it possible to study the security of the MOD in a dynamic, changing environment. Security, too, may be analysed with this approach, and thus security theory is analysed in the next chapter.

4 THE NEW PARADIGM OF SECURITY

In the Finnish language the terms security and safety share the same translation, "*turvallisuus*". In the English language *"secure"* has the meanings of not feeling worry; or doubt; or not likely to be lost; or to fail; or even to have certain guarantees. "Secure" may also mean to have something protected; or firmly fixed; or not likely to fall; or to be broken. The term "Secure" is also used in the meanings to obtain something; sometimes with difficulty; or to fix something firmly; or fasten something firmly. The term "Secure" is also in use to mean making something safe or to protect something. (Crowther, Kavanagh & Ashby, 1999, p. 1062)

The term "*Security*" in the English language has the meaning of freedom or protection from danger or worry. "Security" is also used when measures are taken to guarantee the safety of country, person, thing or value. "Security" is used as a thing of value that can be used to make sure that one will keep a promise. A person can be a "security risk" and this exists when a person may be a danger to a country or an organisation because of her or his political beliefs, personal habits or the revealing of secrets to an enemy. (Crowther, et al., 1999, p. 1062)

The word "*Safe*" in the English language is defined as protecting from a danger and harm, and to secure things. "Safe" also means that something is not damaged, hurt or lost; or is not likely to cause or lead to damage, injury or loss. "Safe" is also understood as a condition of a place or providing security and protection. "Safe" can also mean the situation of a person, with the meaning that the person is unlikely to do dangerous things and is cautious. "Safe" shows a cautious attitude; or is based on good reasons or evidence and credibility. The term "*Safety*" is used to mean a state of be-

ing safe or of not being dangerous. “Safety” also means the ability to keep or make something or somebody safe. (Crowther, et al., 1999, p. 1036)

These examples show the diversity of areas explained in different aspects of security, and researchers use of these sectors emphasise the important dimensions of the subject. The development in organisational security in Europe and in Finland has increasingly followed the critical security approach. Thus critical security is applied in this study as a basic perspective when modelling security in chapter 7. To get an academic basis for modelling the concept of security, it is more deeply analysed in this chapter.

4.1 The concept of security

Security is a complex and relative concept, and the subject is defined personally by feeling of security, even though one would have a commitment to the collective defence society. Complexity can be found from the multidimensional definitions of security sectors and security conditions; always from the possibility of measuring security. (Rantapelkonen, 2000, p. 93) Security is defined from the basis of subjectivity, inter-subjectivity or objectivity. Security means the feeling of being and the situation of being without risk and hazard, meaning that security is a subjective feeling or a situation according to ones perception. (Rantapelkonen, 2000, pp. 59-60) *Risk* is “the probability that a particular adverse event will occur during a stated period of time” (Wyllie, 2000, p. 6). *Hazard* means “an individual adverse event to which one may be exposed” (Wyllie, 2000, p. 6).

What threatens security? Full threat assessments respond to the presented question with the *threat* formula presented in Figure 10. Impact “of an event may be measured in terms of money, life or

business continuity, amongst other scales" (Wyllie, 2000, p. 6) Thus, the greater the threat or the impact of the probability of the realisation of the threat, the more comprehensive the needed countermeasures to reduce the risk will be. (Wyllie, 2000, p. 7)

Figure 10. The formula of threat (Wyllie, 2000, p. 7)

$$\text{THREAT} = \frac{\text{HAZARD x IMPACT x RISK}}{\text{COUNTERMEASURES}}$$

The term risk is connected to the security of society when attempting to protect the individual and risk insurance through social security. (Niemelä, 2000, p. 23) The experience of risks has different dimensions such as the observation of risks, the threat of risks, the scale of risks and the possibility to control and demolish risk. (Pentti 2003, pp. 117-148) The influence of a risk on a person is described via the scale of risk. The map of risks is a tool to predict the threat of risk and the possibilities of controlling it. (Raivola & Kamppinen, 1991, p. 13 and pp. 31-33)

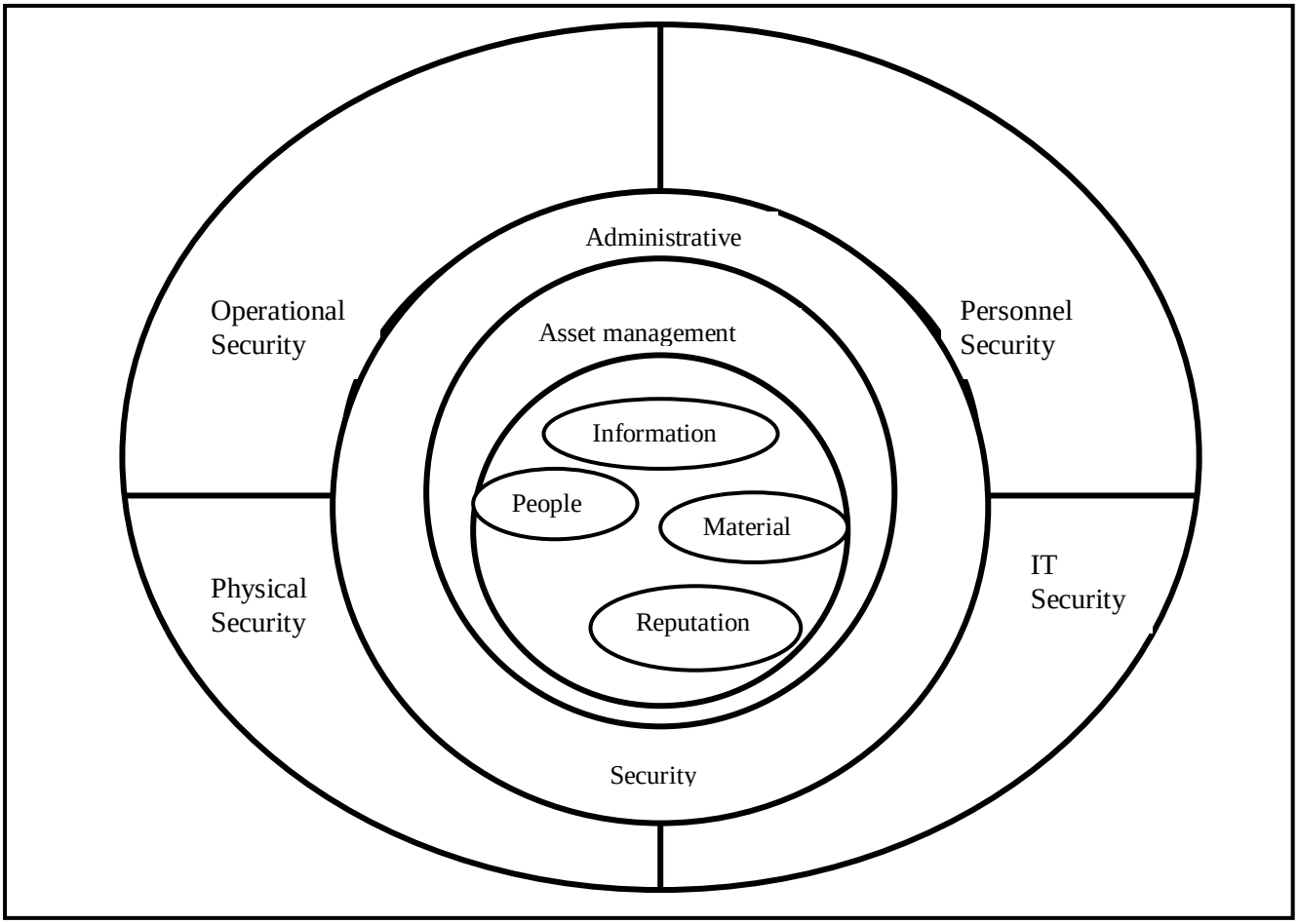
In the concept of security the realistic school (Waltz, 1979) emphasises the state and threat can be recognised as a military one. In the traditional military-political understanding (Rantapelkonen, 2000) security is about survival when an issue is presented as posing an existential threat to a designated referent object. The liberal school (Moravcsik, 1997) emphasises international organisations and threat signifies limitation of individual freedom. Thus, significant values are individuality, equality, freedom and democracy. The constructivist school (Katzenstein, 1996) recognises threat as non-compliance with the observance of norm or as immortalisation and emphasises common values and actors who define norms and response to cultural factors inside a certain, defined identity. In

constructivism, the basic factor behind insecurity is the lack of identity. (Lahikainen, 2000, p. 77; Pentti, 2003, pp. 13-25) In the fields of engineering and technology security is linked to manufacturing machines and the security, reliability and safety of constructions. (Evers and Novotny, 1987)

The content of security is descriptively defined in a conflict situation and a security paradox is an example of complexity while including also the concept of security complex and the concept of security dilemma. (Rantapelkonen, 2000, p. 93) *Security complex* means such complex relationships between states that regional security problems between states cannot be separated from each other. (Buzan, 1990, pp. 186-229) The threat is centrally connected to the security dilemma, which can be broadened outside the military-political sector. (Hopf, 1998, pp. 171 – 200) The *security dilemma* is a central corner stone of the realistic tradition and the paradigm of realism. States live in anarchy and they try to amend their security by improving military capability and by making others feel insecure. This way of thinking and behaviour leads to an endless circle between security and insecurity. (Herz, 1954, pp. 2 - 16 and pp. 23 – 25) This leads to the *security paradox* meaning that the more powerful military a state has the more secure the situation is for it, but simultaneously the more threatening the situation becomes for other states. (Baldwin, 1997, pp. 15-16) Especially realistic security tradition includes a problem of the concept of the security dilemma by the circle reasoning. (Rantapelkonen, 2000, pp. 171 - 172.)

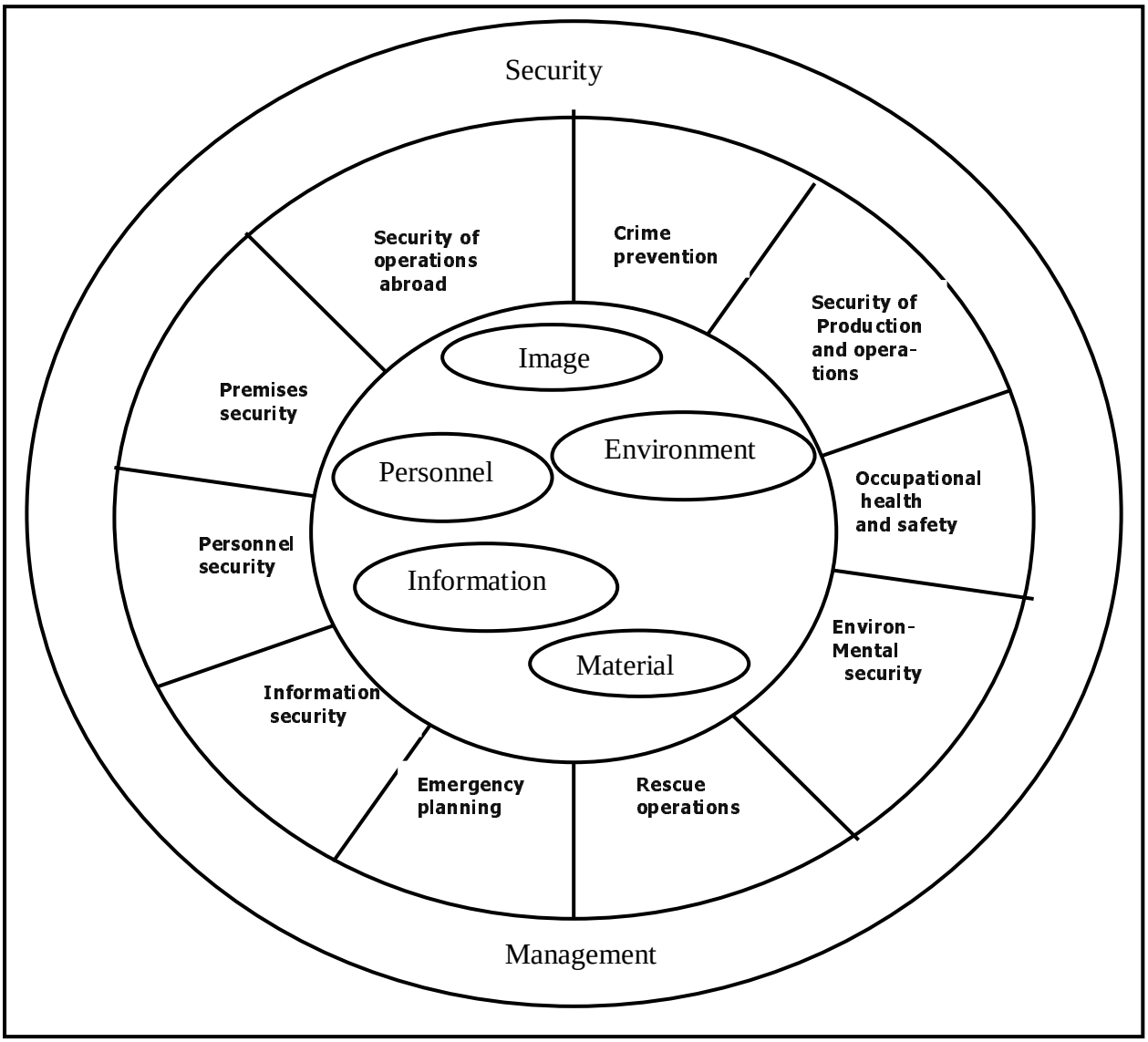
The concept of *information security* highlights that security is not just a feeling, but also additionally a mathematical parameter or part of the risk analysis process. People are not able to calculate and be analytical. Security is often a matter of trust in the psychological sense, not the technical. Trust is essential for organisations and presents organisational security according to the four-sector model. (Virtanen 2002) The model is presented in Figure 11.

Figure 11. The four-sector model (Virtanen, 2002, p. 41).



On *corporate security* the statistical approach to security by standards has maintained its position in Finland for a decade. (Pesonen, 1993) However, security leadership has been studied and applied very little in Finland. The analysis of the functionality of safety management systems in installations in Finland, which run the risk of a major accident, is one of the few safety leadership studies. (Levä, 2003) The corporate security model by Tuominen (2004) is presented in Figure 12.

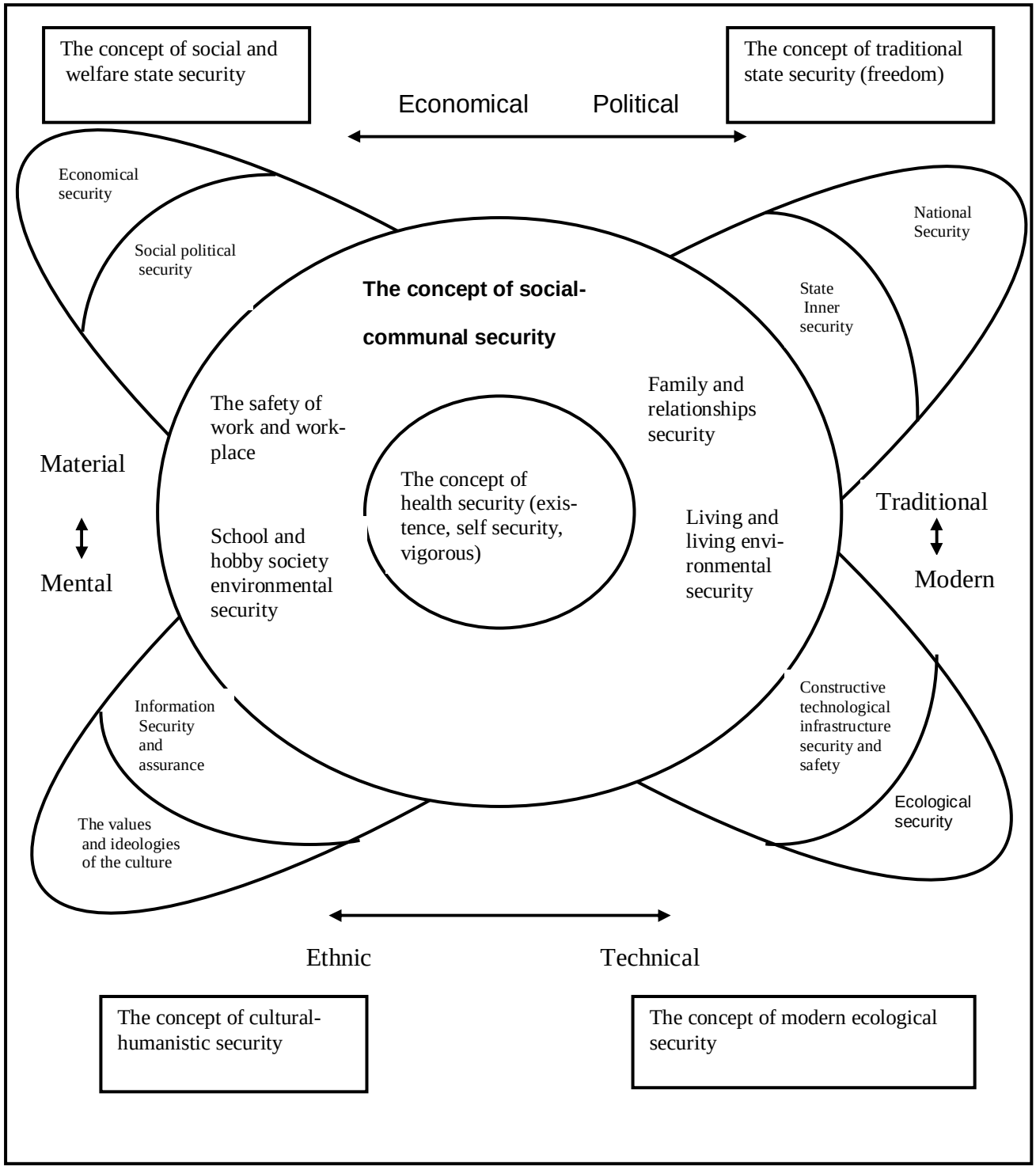
Figure 12. The corporate security model (Tuominen 2004)



In social politics *insecurity* is connected to the terms status, well-being, security of society and social welfare, while in political science and in social politics security is considered to be a national and international question (Laitinen 1999). Security and insecurity is studied from the approach of psychological phenomenon from the social psychological and psychosocial point of view. (Niemelä, 2000) Studies, which observe the social relations of individuals and the quality of these relationships, belong to sociology. (Niemelä, 2000) *Human security* is defined as existing in 23 dimen-

sions. (Niemelä, Kainulainen, Laitinen, Pääkkönen, Rusanen, Ryynänen, Widgren, Vornanen, Väisänen & Ylinen, 1997) The human concept model of of security is presented in Figure 13.

Figure 13. The human concept model of security (Niemelä, 2000, p. 27).



At a personal level for all individuals security is a basic human aspiration. *Insecurity* means that basic human aspirations cannot always be fulfilled in every circumstance. (Niemelä, 2000, p. 22) "Security or insecurity is defined in relation to vulnerabilities, both internal and external, that threaten to, or have the potential to, bring down or significantly weaken state structures, both territorial and institutional, and regimes" (Ayoob, 2003, pp. 128 – 130). Security and insecurity can be approached objectively and subjectively. (Niemelä, 2000) Security and insecurity are considered to be dimensions, which go through all of the different sectors of life, and are connected to everyday life, indicated in their own way as the quality of life of a person. Security and insecurity are certainty and uncertainty of the continuation of good. (Niemelä, et al., 1997; Niemelä, 2000, p. 24)

Security can be seen as a need as noted by, for example, Maslow (1987), Aldefer (1972), Riihinen (1979) and Pentti (2003). *Security as a need* may be defined in three different ways. First: security described as a need for protection and defence against outside dangers. Second: security implemented as a need for continuity and order. Third: security interpreted as a trial to achieve inner mental balance. (1970, pp. 24 – 27) Security is considered to be a significant humanistic and *social value* in the sense of certainty and safety. The absence of different kinds of dangers such as accidents is a value itself. Security as a value may also mean reliability in the sense of predictability and psychological comfort. As a value, security is described at multiple levels. (Kaufmann, 1970, p. 340) To fulfil these needs is the basis of well-being for all individuals. This theory of needs defines a human being as a dynamic alien who tries to achieve needs and to fulfil his intentions. (Aldefer, 1972; Maslow, 1987; Niemelä, 2000, p. 22; Pentti, 2003, pp. 121-125; Riihinen 1979)

The experience of insecurity and identity both arise from the same ground, and both delineate the human relationship with the world, both have the same ontological root even though the relationships occur in different perspectives in the experience of security, insecurity and identity. (Lahi-

kainen, 2000, p. 62) These general remarks are basic to the sociology of security. The issue of identity is inseparable from security. (Booth, 2003, p. 88; Bowlby, 1978; Lahikainen, 2000, pp. 62 – 63) The feeling of security as an adult is based on the view where your own action is seen as consequentially meaningful from the standpoint of your own history and where the future is connected to the past. The aim is to construct a whole, intrinsically managed and complete life and the danger of this possibility not happening is experienced as a crisis. Belief in the continuity of your own identity is a critical factor for security. (Lahikainen, 2000, p. 77; Pentti, 2003, pp. 13-25)

The ontology and epistemology of knowledge on the concept of security leads to the term civilised nation, where in an open society, and in an open culture the right to knowledge, to the access of knowledge and neutral communication is an essential part of the factors establishing security. In the so-called information society it is assumed that people will act willingly to understand and construct their surroundings, life and the whole world where they live, and the access to knowledge can be either via education or some other resource. (Niemelä, 2000, p. 30)

The human concept model can be seen supporting the efforts of the Finnish defence establishment towards the learning organisation due to that fact that both highlight the same aspects of development. Niemelä's model of human security can be seen as breaking barriers of the defence establishment because the traditional way of national security thinking is regarded as a narrow model and the human security model is wider and more comprehensive in all dimensions, levels and sectors of society. Internationally, the United Nations (UN) (Ogata, 2003), the Organisation for Security Co-operation in Europe (OSCE) (OSCE, 2003) the European Union (EU) (Kaldor, et. al., 2004) and also some researchers in the framework of the North Atlantic Treaty Organisation (NATO) (Cohen, 2002, pp. 13-20) have presented the humanistic security perspective.

4.2 The concept of critical security

The concept of the *critical security paradigm* defines security as a quality that actors inject into issues by securitising them, which means to stage them on the political arena in a specific way, and to have them accepted by a sufficient audience to sanction extraordinary defensive moves. (Buzan, Waever & de Wilde, 1998, p. 204) *Securitisation* is an essentiality inter-subjective process where defining security meets the problem of measurement due to the fact that nations and states have different thresholds for defining a threat. Security can be understood as a social phenomenon that can be handled only between subjects. (Buzan, 1990) "Security is a derivative concept; it is in itself meaningless. To have any meaning, security necessarily presupposes something to be secured; as a realm of study it cannot be self-referential" (Williams & Krause, 2003, p. ix).

Securitisation is inter-subjective and socially constructed, where the quality is not held in subjective and isolated minds; it is a social quality, a part of a discursive, socially constituted, inter-subjective realm. The audience of the security speech act decides successful securitisation, and thus, security rests neither with the objects nor with the subjects but among the subjects. (Buzan, Weaver & de Wild, 1998, p. 31) Securitisation is an extreme version of politicisation and it needs the acceptance of the audience. According to liberalism, threats linked to securitisation can effectively be countered with cooperation. Different sectors of security, such as military, can be securitised. The aim of co-operation is to respond to common threats and also to reduce negative effects of one's own activities towards the other partners. Securitisation is always linked with legitimate rights. (Buzan, Weaver & de Wild, 1998, pp. 21 – 26 and p. 49)

The term *critical* in security studies is used in the meaning of implying more of an orientation toward the discipline than a precise theoretical label, and a small "c" is adopted for the definition of

critical for both practical and intellectual reasons. A broad definition allows many perspectives of the discipline outside of the mainstream to be brought into the same forum, with attendant benefits for intellectual dialogue and debate. The critical approach may also adopt the position of a stranger, but not of an outsider. “Yet although a critical distance may be invaluable in allowing us to step back from the claims of security studies, it is also incomplete” (Williams & Krause, 2003, p. xiii).

There are several levels and actors in security, where the upper most one is a global system, or the world, and the second level can be seen as a sublevel of the global level, such as international organisations and associations. The third level combines units such as states, nations and transnational companies, and at the fourth level there are organised groups inside these units and they try to affect the behaviour of individuals. Finally, individuals are the fifth level of security. (Baldwin, 1997, pp. 5-26; Buzan, 1991, pp. 27-29; Buzan, Weaver and de Wild, 1998, pp. 5-6 and pp. 163-164; Hopf, 1998, pp. 171-200; Katzenstein, 1996, pp. 1-32) The critical security agenda of security is presented in Figure 14.

Figure 14. The critical security agenda of security (Buzan, 1991).

Critical security agenda of security

Security Levels:

1. Individual level
2. Regional level
3. System level
4. National level

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Security Sectors:

1. Political sector
2. Military sector
3. Societal sector
4. Economic sector
5. Environmental sector

In the critical approach security is equated with *emancipation* (Booth, 1991, pp. 313 - 326) meaning that nations should be released from factors preventing them from freely doing what they want to do. According to Booth (1991):

> "Emancipation is the freeing of people (as individuals and groups) from the physical and human constraints which stop them carrying out what they would freely choose to do … Security and emancipation are two sides of the same coin. Emancipation, not power or order produces true security. Emancipation, theoretically, is security" (Booth, 1991, p. 319).

Scientific security is anxious to know how people live, and a practical interest with policy relevance is surely part of what is involved in being a security specialist. Abstract ideas about emancipation will not be sufficient: it is important for critical security to engage with reality by suggesting policies, agents, and sites of change, to help humankind, in whole and in part, to move away from its structural wrongs. (Booth, 2003, p. 114; Gal, 1985) Thus, security dilemma as an essential part of the security is seen as the quintessential dilemma:

> "Rather than seeing the security dilemma as the quintessential dilemma, however, a critical perspective might regard it as a sometimes-important phenomenon in relations between states, but fundamentally as an epiphenomenona of fatalistic and hegemonic reasoning and practices through time. The latter need to be understood in order that self-constituting human societies and society can learn new practices to help mitigate and then perhaps one day transcend the traps of security dilemmas" (Booth, 2003, p. 108).

Politicians and the military have their own ideas of security that are not always shared by those for whom they supposedly speak. Thus, the growth of the civil society is important for security and this is why the role of critical security could be defined as follows:

> "to provide new knowledge and more helpful accounts of world affairs and human lives; to look at old facts in new ways; to unsilence the silenced; to help give longer term perspectives than decision-makers concerned with the next election; to expose the hypocrisies, inconsistencies, and power plays in language, relationships, and policies; to provide a more sophisticated language with which to analyse events and problems; to engage in dialogues with policy makers in order to try to pen the latter's imaginations and minds about the ways in which concepts might be translated into better policies; to expose false ideas and reveal the instated assumptions of policies; to pen up space for thought and action; to help students think for themselves; to develop new and more rational theories about global security; to cast a critical eye on all theories and all exercises of power, including one's own; and to speak for cosmopolitan values and to speak up for those who do not have a voice" (Booth, 2003, p. 115).

Criticism to the critical approach (Ayoob, 2003, p. 126) claims that emancipation is a utopistic realism and emancipation the other way round would increase political intolerance. The problem with semantic jugglery is that by a sleight of hand it totally obfuscates the meanings of both the concept of security and emancipation, and that Booth's definition refuses to acknowledge that a society or group can be emancipated without being secure and vice versa. (Ayoob, 2003, pp. 121 – 146)

4.3 Challenges for critical security

A school of critical security develops from “global moral science”, rather than the traditional security theory, and sees as crucial the relationship between theory and its historical/social/political context. Critical security is more interested in the search for meaning than the endless accumulation of knowledge; and it believes that social and political science cannot be separated from life, but instead are inseparable from social and political criticism, replication, and practice. Critical security believes that theory is constitutive rather than explanatory; invention of an emancipatory future is more urgent than the discovery of ultimate philosophical foundations; and the role of academics is that of organic intellectual, or of socially engaged philosopher. The foundation of critical security is based on the belief that politics on a global scale is open-ended rather than determined; and is based on ethical choices rather than on natural instincts. (Booth, 2003, pp. 106-107)

New challenges have been united by a common desire to treat the object of security as the individual, and not as the sovereign state. In this approach security is a condition that individuals enjoy, and they are given primacy, both in the definition of threats and of who or what is to be secured. Concentrating on individual security exposes the ways in which this may conflict with claims of state security rather than presuming an identity by means of sovereignty of the individual with the security of the state. (Krause & Williams, 2003, pp. 43 – 46; Mannoni, 1987)

New basic re-orientation emerges three overlapping arguments that treat individuals as right-bearing persons, as citizens or members of society, or as members of a transcendent global community. Focusing on individuals qua citizens illustrates a central dynamic in contemporary life that is consistently obscured by neo-realism. This is the way in which the most direct threats to individuals can come from the institutions of organised violence of their own state. Individuals as the objects of

security chance, treats individuals as members of a transcendent human community with common global concerns. Paradoxically, shifting the focus of security from the state to the individual allows an engagement with the broadest global threats. (Krause & Williams, 2003, pp. 43 – 46)

The familiar narrative with false premises goes, that it is necessary to move from a state of fragmentation to a state of greater integration: to broaden out toward co-operative, or common, or world security. Thus, any attempt to broaden understanding of security by taking the inside outside, by extending the upside static community to the world of conflict outside, is fundamentally misguided. (Walker, 2003, p. 76-78) To broaden understanding of what security involves need to make a move from the particular to the general, from the territory to the planet, from the citizens of states to the citizens of the world. (Walker, 2003, p. 77-78)

There are, nevertheless, reasons that suggest a certain degree of caution about some accounts of what it means to develop alternative accounts of security. The first reason is that there has been significant progress in working through some of the more fruitful implications of moving from assumptions about the inevitability of conflict to the possibility of co-operation given the logic of the so-called security dilemma. The second reason is that the ideas about political realism serve as a crucial reminder that accounts of imminent historical transformation are invariably overdone. The third reason is that to develop alternative accounts of security may be read, as expressions of a hegemonic normative commitment to the way the world must be. (Walker, 2003, pp. 70-71) On the other hand, ideas about national security can be interpreted as expressions of the legitimating practices of modern states more easily than as empirical explanations of the practices.

A broader conception of security, with a wider agenda and changed practice, or “alternative defence” means new thinking about strategy and international security, which has gradually expanded,

particularly in Europe. In place of the traditional static and militarised perspective on international security, alternative thinkers emphasised no offensive defence, common security, democracy, human rights, disarmament, confidence building, and civil society. (Booth, 2003, pp. 85-86) Attempts to rethink the notion of broadened security pose significant problems, because some fear that once the concept begins to open out, it encompasses new accounts of what security means, or to whom it refers, and it will cease to have any specific framework at all. (Walker, 2003, pp. 75-76)

Difficulties arise with the kind of broadening that is envisaged, and from the control of uncertainty. From this perspective broadening the concept itself is not the challenge; but change of thinking is. Uncertainty is a problem because the critical security approach of established accounts does not permit us to interpret, create concrete threats and risks, identifiable dangers, and bodies who do things. However, no matter how insistent the voices of military and defence establishments might be, in fact it has never been possible to pin security down to concrete practices.

From references it is important to emphasise that the thinking on critical security should not ignore or play down the state and the military dimensions of world politics. What are challenged is the moral and practical status of realism, its ideology of necessity and limited possibility, and its propagandist common sense about this being the best of all worlds. There is an important place in critical security studies for the study of the threat and use of military force, but the study of military strategy should no longer be synonymous with security studies (Booth, 2003, p. 107) Military strategy is a subject area within critical security studies, but it is only one aspect of a wide agenda.

The traditional realist definition of security is inadequate to explain the multifaceted and multidimensional nature of the problem of security. (Ayoob, 2003, p. 121) However, unsystematic expansion of the definition of security threatens to make the concept too elastic, and thus useless. Critical

security favours emancipation, while traditional theories emphasised power and order as the bases for security. The notion of emancipation gives traditional security theorists quite a bit of irritation. Emancipation in critical security studies means freeing people, as individuals and groups, from the political, economic, physical, social, and other constraints that discontinue them from carrying out what they would without restraint choose to do.

Making the individual the object of security provides the conceptual shift that allows these perspectives to take their place as central elements of any comprehensive understanding of security. (Krause and Williams, 2003, p. 43-46) That approach is the fundamental philosophical basis for the conception of security in this study even with the disadvantages of the approach. Making the individual in various guises the focus of security is also a double-edged sword, one that risks simply replicating the difficulties it seeks to overcome. One danger lies in treating individuals as ungrounded in any social or historical context; hence their meaning is purely abstract. This problem leads to the often-stated criticism that if we regard individuals qua persons as abstract actors, then a return to a contract theory of the state is almost inevitable. Even more critical is the statement of human-rights standards as culturally specific, or as being an attempt to impose Western standards on others. Epistemologically, (Krause & Williams, 2003, pp. 43 – 46) making the individual the object of security involves moving away from the objectivist, rationalist approach toward more interpretive modes of analysis.

The critical security perspective easily evolves into this research for studying the security of the MOD and for the modelling of security. The nature of this approach, by seeking new findings, and by seeking change with interaction of subjects from the individual point of view is crucial for this study to succeed. Thus, with multifaceted and multidimensional features it is a challenging but also rewarding attempt, especially, because this research evidently presents the reader an opportunity for

interaction and for making his own interpretations along the study procedure of this report. Thus, the next paragraph leads us to the modelling of security and to the empiria of this study.

4.4 Modelling security

The term "*Model*" in the English language has the meaning of a representation of something; or a design of something that is made so that it can be copied in another material; or a design of product. "*Model*" also means a simple description of a system, used for explaining or calculating; or a system used as a basis for a pattern. "Model" can also mean a person or thing regarded as an excellent example to copy. "*Model*" also means to work as a model with the meaning to display clothes by wearing them; or to make a model of something from a material with the meaning for example to shape clay or wax. The word "*Modelling*" in the English language is defined as the art of making models; or working as a model. (Crowther, et al., 1999, p. 749)

Anderson and Burns (1989) consider modelling in research as an important source of theorizing. "We can consider models as well-developed descriptive analogies used to help visualize, often in a simplified and imitative way, phenomena that cannot be easily or directly observed. Each model is thus a projection of a possible system of relationships among phenomena, realized in material, verbal, or symbolic terms. Replica models are usually material or pictorial representations made with a change in spatial or temporal scale. Symbolic models tend to be intangible, using abstract verbal, graphic, or symbolic representation to stand for conceptual systems. (Anderson & Burns, 1989, 30)"

Modelling security helps people to understand the meaning and content of the term. On the basis of the previous chapters it became apparent that none of the security models described in the theoreti-

cal part of this study comprehensively meets the demands of the security of a learning organisation. None of those security models fully response to the new threats in the changing security environment as is necessary. Neither do they especially consider the Government level and the MOD as its subordinate organisation.

From the point of view of the defence establishment the present situation where the level of threats is low is interesting, because the MOD can be threatened intentionally, or by accident. In this study the content of both secure and safe, and security and safety have been combined, and the term secure or security is used. This definition is broad and, as wider than either of the above mentioned separately, gives new approach to the matter at hand, as also defined by Crosby (2004). This wider perspective of security makes it possible to model it with strategic planning and the learning organisation in a new way.

The critical security theory is the core of this study because of the nature of the theory and the clear differences with the traditional realistic security thinking in the Finnish defence establishment. Thus, new information is gained from the study. Additionally, it has essential similarities to the theoretical background of this study: the qualitative approach with the use of emancipation; constructivism; constructivist learning; the learning organisation and strategic planning. The essence of the critical approach is that it expects change, and one of the attractive features of the critical dimension in security is also that it never settles into the complacency of what it seeks to overthrow.

The new security model will be presented in detail in chapters 6, 7 and 8. Consequently, it is constructed from the point of view of critical security to respond to the challenges of conceptualising the security of the MOD. Nevertheless, the basis of the model is quite much theoretically emphasised. Thus, testing through security surveys and interview interventions in the MOD deepens the

model, i.e. its reliability, credibility and transformability. However, because the MOD is a sub-organisation of the Government, the heuristic hypothesis is that this tested model may also be applied elsewhere among the state organisations and perhaps in the private sector as well.

Group categorisation, contextual reference and sociality bind the defence establishment to the security thinking of the learning organisation. Ideas and principles of the learning organisation and of human security are in many aspects suitable for the basis of development of the hierarchic culture and organisation of the defence establishment. The danger is that all of the personnel cannot be committed to its development and that development objectives will remain at the level of apparent changes. However, this approach is worth studying for the basis of modelling security in the MOD. As a matter of fact, the critical security theory provides much guidance for modelling especially from the point of view of wide-range and the horizontal approach as well as connections to society and to the global environment by breaking boundaries. Additionally, data from Finnish society with comparison to international dimensions inevitably possess extra importance, and add to the transferability of the reference in this study.

PART II

THE WORLD OF EMPIRIA

"The wicked flee

when no man pursueth:

but the righteous are

as bold as a lion."

Proverbs 28:1

The National Law Enforcement Officers Memorial

Judiciary Square, Washington, D. C.

The United States of America (2005)

5 STUDY SCOPE

Internationalisation and structural changes in society greatly affect Finland's ability to secure the vital functions to society. In addition, the Government's Finnish Security and Defence Policy reports of 2001 and 2004, respectively, paid particular attention to the threats associated with further international integration. This also raised the need to study the security of the Finnish Ministry of Defence (MOD). Examining the conceptions of the personnel of the MOD is both a focus and a means for developing the constructed models. Furthermore, the study process has an influence on both modelling security and on the security of the MOD. The heuristic hypotheses is that there is a need for a qualitative approach in the name of security at the MOD, and that developing the security of the MOD according to the strategic security model (SSM), as presented in chapter 7, is a change agent actor for better efficiency. However, the principle of maintaining the organisational functions, structures and procedures the same in normal situations as well as in exceptional situations does not make a crucial difference for the perspective of this research. Reporting during the procedure shows the theoretical relativism and develops the deepening of understanding of the content of the phenomena at hand. This means incorporating new terms into our lexicon.

The qualitative approach has been chosen because communicative co-operation is reflected through all levels of the new security thinking, from an individual level to a group and an organisational level and to a global level as well. Social constructivist perspectives are often referred to as "reflectivism" or "interpretivism" (Wendt, 1992, pp. 391-425). From the perspective of social constructivism international co-operation has to be analysed in the framework of norm change and new norm creation through the social and communicative practices of participants, and thus, Finland must do so as well. These new norms in international institutions, for example, in the Organisation for Eco-

nomic Cooperation and Development (OECD) and in the United Nations (UN) (Risse-Kappen, 2003, pp. 263-265) have causal effect when participants believe in their conformability and importance through communicative processes. Additionally, social constructivism (presented in chapter 1) has been used because the new security approach reflects from abroad to the security of the organisation of the MOD. The critical security approach is radically constructivist regarding security, which is the specific form of the structure of this study in the MOD.

The structure of this report does not accurately follow in detail the general structure of the dissertation report, but according to Denzin and Lincoln (2003) this kind of exception is acceptable when the research process is easier to understand this way. Thinking follows time, where content and context orientation of the past, present and future all have their own horizons. The method most likely forms a critical discourse of social reality in which the combining of various views illuminate triangular and explain the phenomenon being studied from the perspectives of the philosophy of the academic context chosen. The relationship to social constructivism is critical because the work makes a clear break away from cognitivism and, on the other hand, prefers to synthesise the main schools of the constructivist approach as well as the educational tradition into one framework.

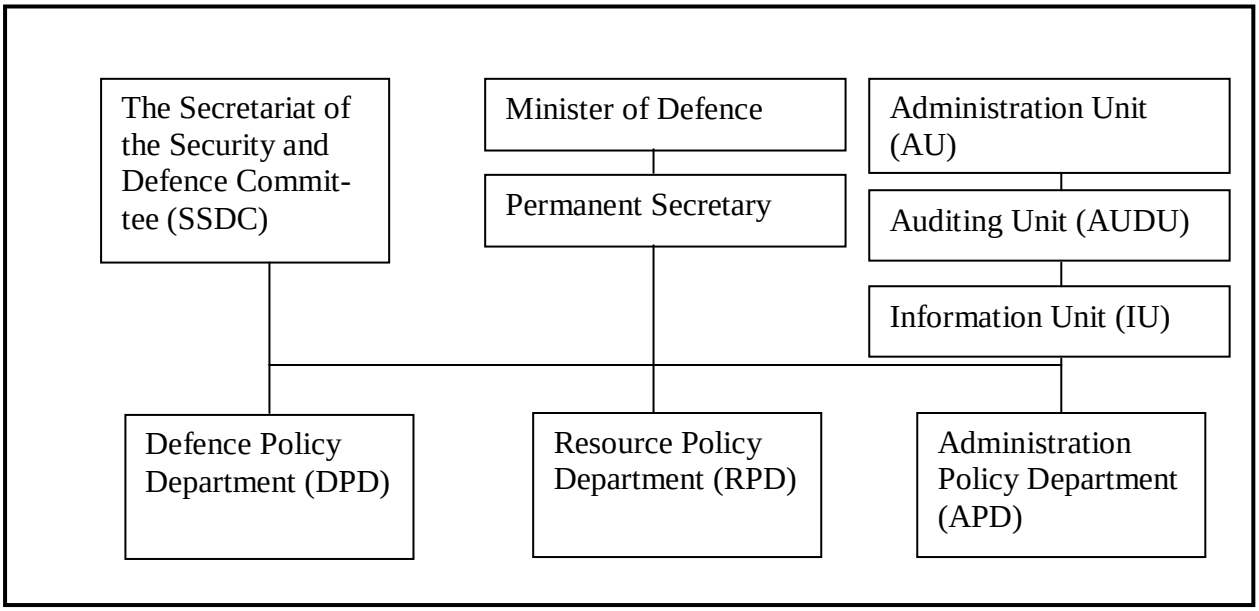
The approach to security is critical, because the subject of security studies broadens the agenda essentially in a different way. The term “critical” in security is a fairly recent discipline and signifies more an orientation toward the discipline than a precise theoretical label. Additionally, synthesising the different schools of the security approach as well as the academic tradition into one framework and then, on the hand, seeing significant similarities in thinking, concern both constructivism and security. As a performer a human being is an entire individual whose external visible activities are not solely based on cognitive processes (Reynolds, Sinatra & Jetton, 1996, p. 103). The author

agrees with the view of the concept of constructivist knowledge and with the approach to learning understood according to the constructive concept of learning.

5.1 The demography of Finland's Ministry of Defence

Pursuant to the Decree of the Ministry of Defence (Puolustusministeriö, 110/2003) on the Rules and Procedures of the MOD it is responsible for: 1) a holistic role at the Government level in the field of National Defence Policy; and 2) coordination of total defence aiming at responding to all military crises and threats with national resources, and readiness for international interoperability. (Government report, 6/2004) The organisation chart of the MOD (Puolustusministeriö, 2004a, 2004b, 2004c) is presented in Figure 15.

Figure 15. The organisation chart of the Finnish Ministry of Defence, 01 Jan 2002.



The MOD guides the defence establishment, with a totalling 17 816 personnel, including The Finnish Defence Forces (FDF) and the Defence Administration's Construction Establishment (DACE). (Puolustusministeriö, 2004a, 2004b, 2004c) Information on MOD personnel is in Figure 16.

Figure 16. Information on the personnel of the MOD, 01 Jan 2004.

The Finnish Ministry of Defence:	Personnel	124	100 %
	Male	66	53,1 %
	Female	58	46,9 %
Average age of employees		44,4 years	

Pursuant to the Decree on the Ministry of Defence its Rules and Procedures (Puolustusministeriö, 110/2003, 7 §, 10 § and 13 §) assign emergency planning and security planning as the responsibility of the Establishment Unit. The Secretariat of the Security and Defence Committee has its own holistic role at the Government level in the field of national defence. The Permanent Secretary of the MOD chairs the Security and Defence Committee. The Defence Policy Department carries the responsibility in the field of national defence policy and international defence policy.

Finland's participation in decision-making in all circumstances on the external activities of the European Union (EU) is nowadays a dimension concretely affecting national policy. According to the objectives of Finland's security and defence policy, the securing of society's vital functions contributes to the safeguarding of national sovereignty and the population's livelihood. The MOD is responsible for co-ordinating the measures for national military defence designed to counter military threats against Finland and to provide executive assistance to control other types of threats as well as to permit Finland's participation in international military crisis management. Ministries have been assigned responsibilities for co-ordinating functions of: Finland's vital functions, estab-

lished targets, and development policies that guide administrative branches of the government in strategic tasks under all circumstances. (Puolustusministeriö, 2004d, 2004e, 2004f, 2004g) The division of the personnel of the MOD (N=124) into leaders, experts and others is presented in the personnel chart of the MOD in Figure 17. The division is used in the empiric part of the study.

Figure 17. The personnel chart of the Finnish Ministry of Defence, 01 Jan 2004.

Category	Department/Unit								Total	(%)
	Top management	SSDC	DPD	APD	RPD	AU	IU	AUDU		
Leader	2	1	3	5	5	5	1	1	23	18,5 %
Expert	1	2	14	15	16	1	3	1	53	43,6 %
Others	2	2	2	5	7	27	2	1	46	37,9 %
	5	5	19	25	28	33	5	3	124	100 %

Organisational security elements (Figure 19) link interaction between personnel of the MOD and the author. The Committee of Readiness with eight (n=8) participants at the strategic level chaired by the Permanent Secretary, the Security Team with seven (n=7) civil servants, and the Occupational Health and Safety Committee with safety delegates and trade union representatives totalling 12 people convenes on a monthly basis and provides permanent coverage of 25 (20 %) individual people actively dealing with security issues. Additionally, occasional exercise, education and training activities with the protective system add to the total of personnel involved in security issues.

5.2 Research questions

The general aim of the research is to study the security phenomenon in the framework of the learning organisation. The critical security approach is the basis of the intervention with the help of the strategic planning perspective. The main focus of this research is to construct a strategic security

model and a security leadership model. Examining the conceptions of the personnel of the MOD is also a sub-focus and at the same time a means for developing the constructed models. Furthermore, the aim is to study what effect this process has both on the models and on the security of the MOD. The literature review is the basis for conceptualising the challenging field of the theoretical framework. The conceptual extent of the study may be a bit unusual for a dissertation, but outlining the research area from the literature review perspective added with the construction of survey and interview outcomes clarify the challenging constellation. The key question in this research is what kind of role critical security has in the changing process of a learning organisation. The heuristic hypotheses are that there is a need for a qualitative approach in the name of security at the MOD, and that developing the security of the MOD according to the newly developed security model is an agent for change for better efficiency. Derived from the previous text the research questions are formulated as follows:

1. How can security be modelled in a learning organisation?

What impact does the new security paradigm have in a learning organisation with a critical security approach? The international environment whose main institutions are linked to Finland have more and more put emphasis on security and demands a more comprehensive security approach from its members. The academic interest is how this new phenomenon's impact can be modelled in a learning organisation in the post-modern era?

2. What are the conceptions about security of the personnel of the MOD?

The interest is to clarify the conceptions about security of the personnel in the study context because the personnel of the MOD are working in an organisational environment that is aiming at becoming a learning organisation.

3. How can security models be modified through the conceptions about security in the MOD?

The social constructivist approach in the qualitative framework as a new perspective in the MOD will probably create new security innovations and thus support the development of the security of the MOD as well as the testing of new models.

4. How can security be modelled through the concept of the Balanced Scorecard (BSC)?

The interest is to clarify the concept of security in strategic planning with the BSC. This also clarifies the differences of the BSC and the Total Quality Management (TQM).

5. How can security models be modified through the concept of social constructivist approach?

The social constructivist approach in the qualitative framework as a new perspective in the MOD will combine several different data. The data is linked to each other in time frame, which will authorize the use of social constructivism. Opening the data will also clarify the procedure of constructing security leadership in the MOD.

6. How does the new security paradigm impact the organisation of the MOD?

The new security paradigm with the empirical research results will obviously have some consequences on the MOD. What kinds of consequences is an interesting question? What should be done in the perspective of the new security paradigm to develop the security of the MOD?

6 METHODOLOGY OF THE RESEARCH

Triangulation here means the combination of multiple data, methodological practices, theories and research as a strategy adding breadth, complexity, richness and depth to a study. (Flick, 1998, p. 231) Triangulation is not a tool, or strategy of validation, but an alternative to validation. (Flick, 1998, pp. 229-230) However, it is *phenomenography* (Marton, 1994, p. 4424) that is the main academic methodology, which is additionally used as ”inherently multi-method research, including scientific experiments, quantitative social research, and qualitative research methods from many disciplines as necessary to address the problem at hand,” (Greenwood & Levin, 2003, p. 144). In this sense the study follows more the ideas of Alasuutari (1993) than Varto (1992). Both discuss *qualitative research* but, where Varto (1992) sees that no quantitative aspects are accepted in qualitative research Alasuutari (1993) sees that the use of all possible means to collect information, both qualitative and quantitative, are acceptable. Objective reality can never be captured, as we can know an object only through its interpretations.

This study is mainly conducted through *the methodology of qualitative research*, which according to Niskanen (2002, pp. 24-40) means an empiric approach considering and including especially qualitative aspects and details. Conclusions in qualitative research are not normally statistical because interpretations have a higher status. Generally speaking, qualitative research consists of the collection of perceptions, simplification of perceptions and the solution of the research problem. In practice, qualitative research is integrated using theories and methods from different sciences. *Qualitative research* means interaction between subject and researcher, where the hypothesis is flexible and can be considered to be value-oriented. Usually the study is horizontal, because in

qualitative reporting the aim is also to have interaction between the reader and the report, in other words the aim is to achieve *double hermeneutics*.

6.1 Phenomenographic perspective

Phenomenography (Marton, 1994) is a methodology which has been the basis of many approaches to learning and student understanding of a wide range of concepts in a variety of disciplines. It has developed into the investigation of how people understand conceptions. *Phenomenography* is an "empirical study of the limited number of qualitative different ways in which various phenomena in, and aspects of, the world around us are experienced, conceptualised, understood, perceived and apprehended" (Marton, 1994, p. 4424). Phenomenography seeks to identify the qualitative different ways in which individuals experience such aspects of their world as teaching, learning or the meaning of disciplinary concepts. (Ashworth & Lucas, 2000, pp. 295-307; Marton, 1981, pp. 177-200; Vironen, 1999.) However, phenomenography is not developed from the phenomenological science heritage, but instead from the basis of empirical research and pragmatic thinking. (Järvinen & Karttunen, 1997; Kallioinen, 2001, pp. 56 - 57)

The aim of the phenomenographical approach is to characterise differing experiences and understandings "in terms of 'categories of description', logically related to each other, and forming hierarchies in relation to given criteria. Such an ordered set of categories of description is called the 'outcome space' of the phenomenon concept in question" (Marton, 1994, p. 4424). Ashworth and Lucas (2000) define the aim to be "to arrive at a structure within which the various student conceptualisations of the relevant concept are fitted" (Ashworth & Lucas, 2000, p. 298).

Conception can be compared to a picture, which is created from a certain phenomenon by combining experience and thinking. (Syrjälä, et al., 1995) Presuppositions that should be bracketed may be listed as (a) important earlier research findings; (b) assuming pre-given theoretical structures or particular interpretations; (c) presupposing the investigator's personal knowledge and belief; (d) assuming, prior to acquaintance with the nature of the experience itself, specific research techniques; (e) the researcher's concern to uncover the "cause" of certain forms of person experience (Ashworth & Lucas, 2000, p. 298). The aim is to reveal the study participant's experience, not the researcher's expectations. (Ashworth & Lucas, 2000, p. 298)

Phenomenographic research practice consists of two key issues. The first is the need to *bracket* presuppositions in particular, setting aside initially the objective of producing categories of description and presuppositions about the precise thing being studied. The second issue is developing empathy in the meaning of involvement, imaginative engagement with the world that is being described by the person. However, the requirement to engage and empathise with the life world of the person may involve avoidance of the espoused production of categories of description. (Ashworth & Lucas, 2000, p. 299 and p. 307)

Marton (1986) considers it an important aspect to also create a pool of meanings. The researcher studies and compares the differences and the similarities of the pool of meanings and this procedure clarifies special features of the categories. Every category gets its criteria and bordering cases' significances are evaluated carefully. In the end, categories are reflected on the raw data. (Häkkinen, 1996; Marton, 1986) However, it is in the end the decision of the researcher how and what is an understandable description, which also describes as well as possible the empirical material. (Järvinen & Karttunen, 1997)

Conceptions in categories of meanings and the interpretation reveal the conceptions of people studied and this explains the contents of the meanings, based on the theory. This progression makes the meanings of individuals understandable, which leads to interpretation and which then is followed by a conclusion. Qualitative research uses the term explanation and not reason, and understanding is one category of explanations. From these categories the researcher makes his own theory, which is a model of an explanation. By building up multidimensional categories and categories on different levels it is possible to achieve an analytical induction. (Syrjälä, et al., 1995, pp. 123-129)

The categories of description must depend upon an earlier evocation of peoples' very own descriptions of their relevant experiences. A paramount requirement for phenomenography is to be sensitive to the individuality of conceptions of the world; it must be grounded in the lived experience of its research participants. Without this, the descriptions of peoples' experiences will be unsound and the categories of description will be arbitrary. Yet, research procedures for revealing personal experiences are not clearly stipulated within the literature of phenomenography. The term "*bracketing"* indicates the methodological requirement for achieving understanding of the person's experiences and refers to the need for the researcher to set aside his own assumptions in order to register the subject's own point of view (Ashworth, 1999). According to Marton (1994): "It is the researcher who is supposed to bracket preconceived ideas… he or she is supposed to focus on similarities and differences between the ways in which the phenomenon appears to the participants" (Marton, 1994, p. 4428). In this research the phenomenographic approach is used especially in the analysis process of the interviews, in the analysis processes of the open questions of the VEIVI security net survey and the strategic security survey. Additionally, the phenomenographic approach is applied in the remodelling process of security on the basis of the whole empirical data collection.

In the defence establishment equivalents to the phenomenographic approach may be found in *military pedagogy* (MPED) that involves the principles of the cognitive-symbolic cultural tradition with the interpretive creation of a social world. Meanings have a major role both for the individual and for society, and thus the MPED develops research methods based on narratives, on open discussion and interaction between the researcher and the object. These stories are strictly connecting meanings involved in processes of the narratives. (Florian, 2002, pp. 21-31; Kangas, 1999, pp. 18-20; Toiskallio, 1998a, pp. 57-59; Toiskallio, 1998b, pp. 12-13; Toiskallio, 1998c, pp. 162-165 and pp. 178-180; Toiskallio, 2000b, pp. 45-64)

6.2 Systematic analysis

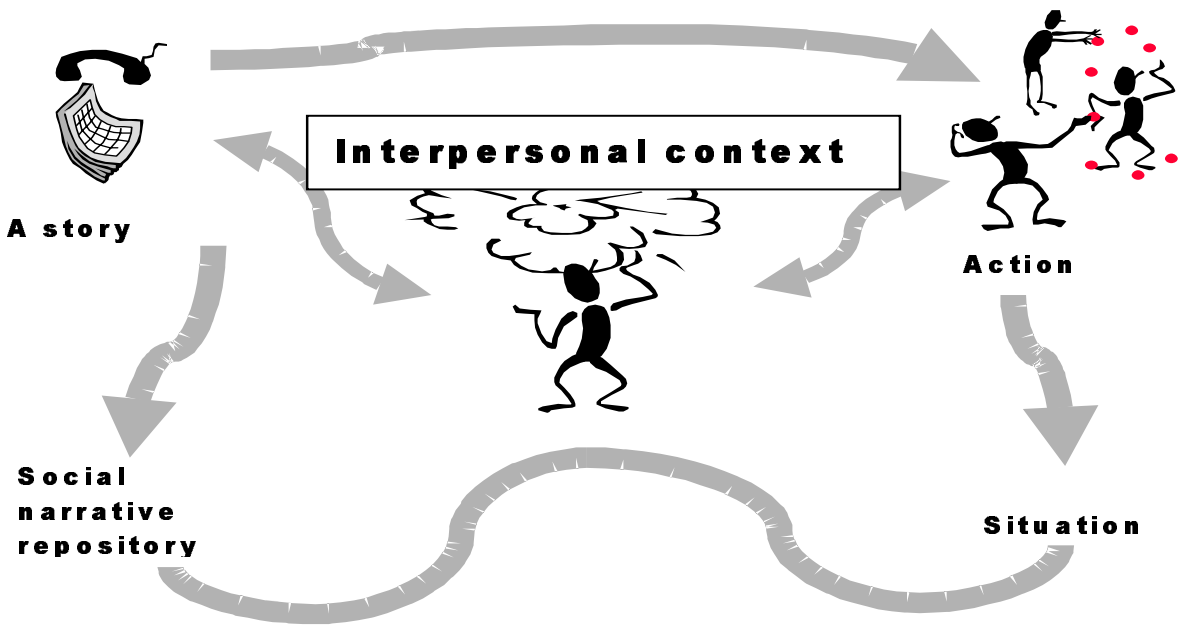
Content analysis from the data is a survey technique that has been used for the objective, systematic and quantitative description of the implementation of data communication. (Kyngäs & Vanhanen, 1999) In order to gain greater clarity on systematic analysis the core in the selection of premises, study framework, theoretical aspects, and the selection of texts has been described. In this way the analysis process gets as close as possible to the research object, and has the possibility of exploring the object in depth using the researcher's insider knowledge and experience. Due to personal experience delusions may exist in the analysis, which are avoided by explicating the data in chronological order, and by reflecting on the framework. (Jussila, Montonen & Nurmi, 1989, pp. 203-204) In this study content analysis is applied in the analysis processes of the literature review in modelling security, in the analysis processes of the VEIVI security net survey data and in the analysis processes of the strategic security survey data. Systematic analysis can be criticised for being a simple non-academic analysis method. (Kyngäs & Vanhanen, 1999) For Berelson (1952) it is not only a data collecting and categorising method but it also develops our understanding of communication.

The data and references used in this study have a public nature, relationships and meanings and because the public nature of the organisations' data may impact the credibility of the information, practice may differ a lot from the text. An awareness of this fact is essential in this study due to the sensitive character of security issues in the defence establishment.

6.3 Narrative perspective

Thinking flows between time, content and context orientation where the past, present and future all have their own horizons. On the other hand, the methodological approach shares aspects of narrative research. Hänninen (1999) defines the narrative circle in Figure 18.

Figure 18. The narrative circle (Hänninen, 1999, p. 21).



Narrative may be understood as a spoken or written account of events, a story. It may also have the meaning of telling the story. Academically, narrative research in this study is a story, which by definition has a beginning, middle, and end. The story happens at a time and place and in the middle when an unusual action or event occurs. (Denzin & Lincoln 2003, 3-4-,16, and 21-22.)

The research has concretely changing influence in the defence establishment and clarifies the processes of security thinking from different perspectives. Additionally, procedures with different paradigms are flexibly analysed and the active role of the author illuminates critical approach. Emancipation is a useful approach because of the intention comes up with a different approach in the defence establishment and to stir free discussion about the matter at hand.

6.4 About reliability and validity

In the phenomenographic approach there are criteria for reliability, both for the data and categories. In data *reliability* the critical factor is whether the data from the researcher's perspective and from the object's perspective is identical and that the data is relevant from the study premises. In the reliability of the categories the critical factor is whether the categories present meanings, what object is meant and are the categories relevant from the study's premises. Thus, phenomenography has been criticised for supporting the idea and of suspecting the thinking process to be static, and that it forgets the context of conceptions. (Syrjälä, et al., 1995, pp. 123-129) There is "an inevitable tension between being faithful to the data and at the same time creating, from the point of view of the researcher, a tidy construction that is useful for some further explanatory or educational purpose" (Walsh, 1994, p. 19). Subsequently, in this study stages in analysis move away from the experience of the individual to a focus on the comparative experience, through the pooling and comparison of

quotations in the framework of meaning units. (Karlsson, 1993) The transcripts, recorded tapes and the picture of the interviewer also create an internal conformability perspective. This evidence refers to the reliability of the description given by the participant.

Reliability reflects on the strength and duration of the study, how cases are linked as belonging to the same category by different researchers or by the same researcher in different situations. (Jussila, Montonen & Nurmi, 1989, pp. 157-158) The analysis process is possible to evaluate in a way that from references and quotations in the text conclusions can be made. (Hammersley, 1992, p. 67) Authentic and primary reality are often more important to the qualitative research than reliability (Silverman, 1994, p. 10). Thus, the authentic, primary understanding was collected from the experiences of the personnel of the MOD. This can be also seen as an explanation of the main object of the study in qualitative research terms because the ministry is small. The relationship between the researcher and object, in the MOD, can also be described more easily by political than scientific terms. (Hammersley, 1992, p. 67) The interpretations are attempted to express explicitly to extend reliability and to avoid the problem of the researcher not being objective in the analysis process. (Jussila, Montonen & Nurmi, 1989, p. 200)

Validity means truth that has been interpreted to the extent where the report precisely presents the social phenomenon that it reflects. (Hammersley, 1990, p. 57) *Face-validity* as used by Cavanagh (1997) is described by using an evaluation group of the security experts of the Government in different phases of the study to evaluate and cross-check the content of the text, the material and the results. This procedure aims at securing credibility and dependability of the research and the report. A negative point for face-validity is that experts cannot understand the study in the same way as the researcher. The developer of the VEIVI survey used face-validity of the VEIVI security net survey to further improve its credibility and conformability. He reflected on and contributed to the inter-

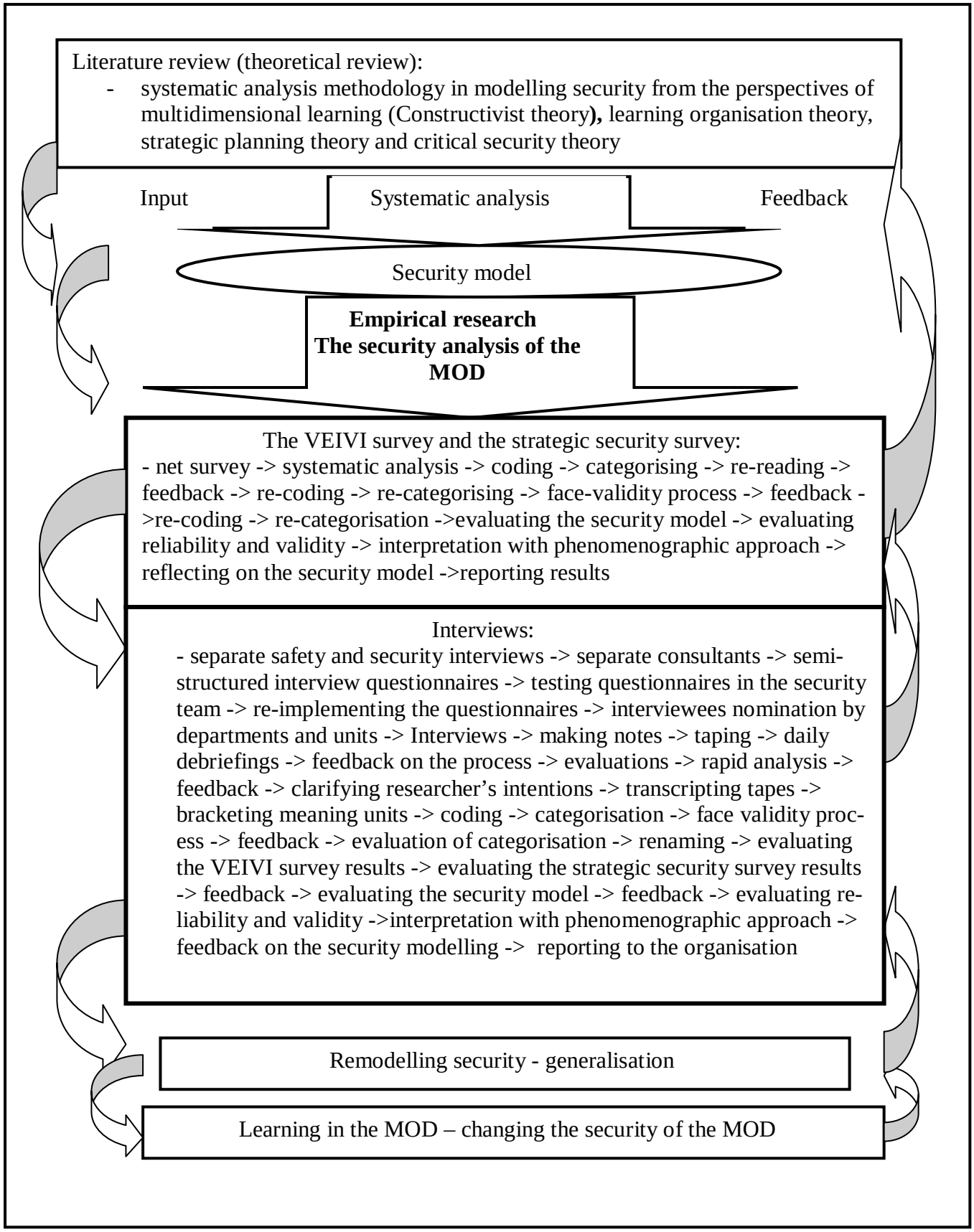
pretation of the results with the lifelong development process of the survey and with reflection to the results of other equal study archives.

6.5 Data analysis process

Interventions may have two-sided meanings: to change the reality, so that it is possible to study it, or to study reality, so that it could be changed. The nature of social activity explains this double meaning. Social activity is not static, even though it appears inconveniently to stabilise, structuralize and modify reality. This event includes the trend for the status quo phenomenon (Heikkinen & Jyrkämä, 1999).

The interventions shown in Figure 18 have a vital role in this research, because they direct, guide and categorise the process of the inquiry. The interventions aim at change for the better, but in this study emphasis is on modelling strategic security and clarifying security conceptions of the personnel of the MOD. The aim of these interventions is to start a process, including the philosophical idea about lifelong change and development, where different bodies of security are in active interaction. Thus, since April 2004 the Committee of Readiness, with the Directors General and Directors of Units chaired by the Permanent Secretary, has guided and directed the security analysis process of the MOD. Since February 2003, the Security Team with representatives from all departments and individual units has on monthly basis shared security information, evaluated and operationalised the security of the MOD. These two elements of the security organisation of the MOD (n=15; 11 %) and other individuals actively dealing with security development procedure made up a continuous interaction between the researcher and the personnel. The data analysis process is presented in Figure 19.

Figure 19. The data analysis process.

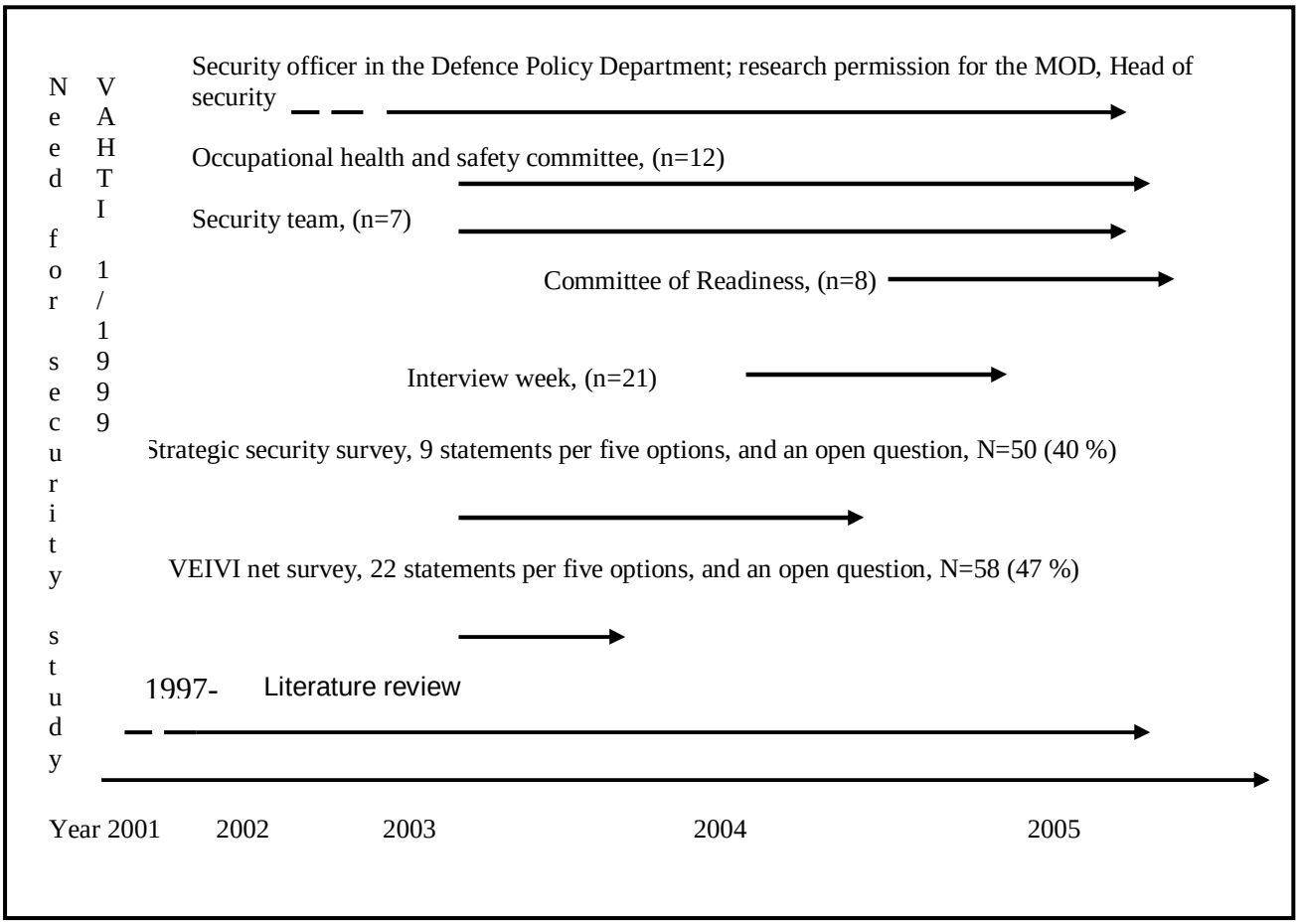


Since February 2003, the Occupational Health and Safety Committee (n=12; 9 %), meeting a minimum four times per year in addition to occasional exercises, education and training activities, increased the added value of interaction among personnel involved in security issues. Therefore, the amount of responses from the elements of the inquiry was livelier than just the research activity itself. Due to this procedure the results of the research have a direct effect on the security of the MOD and add value for its development. However, the attitude of the top leadership is critical. Because of this structure of continuous interactive data collection, analysis and interpretation, the outcome of this study is a combination of the parts of linked together like clusters. The surveys' and interviews' data collection is discussed in the following paragraphs.

6.5.1 Data collection

The continuous interactive data collection, analysis and interpretation procedure is the premise of the empiric research. The literature review, surveys and interview data collection is discussed in this paragraph in detail. The research material is mainly selected from dominant trends and partially from critical publications. The mainstream on security represents, for example, the ideas of Buzan (1990) and the social constructivist research heritage. This includes ideas about critical security and human security. From the defence establishment the study references have leaned on the concept of traditional realistic security, because it follows the dominant trends of the official Finnish security policy from a political perspective, especially in the military context. The data collection process is presented in Figure 20.

Figure 20. Chart of data collection.

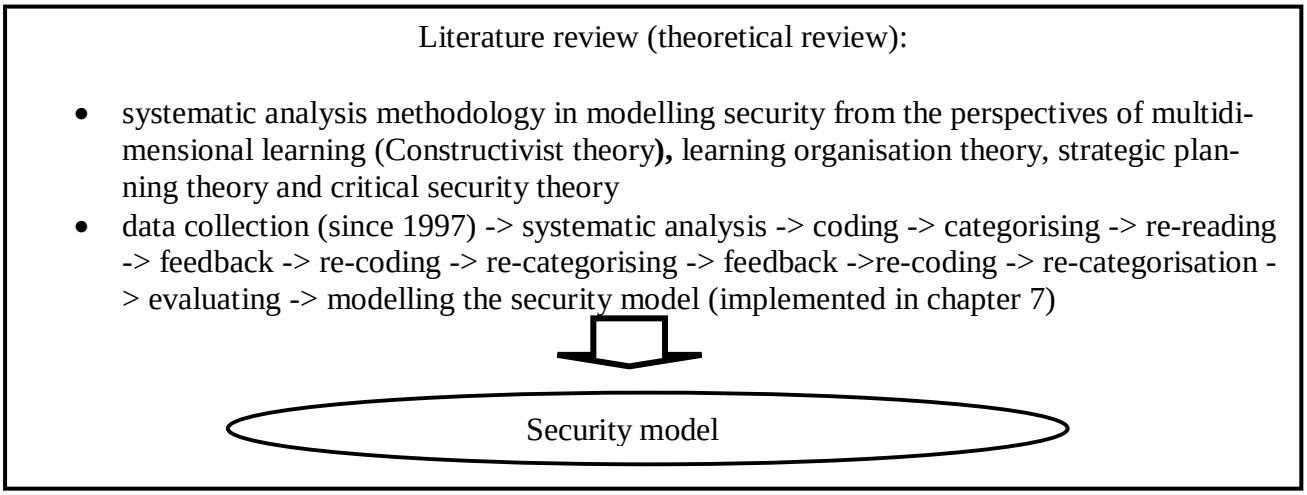


6.5.2 Systematic literature review for modelling security

The systematic literature review for the modelling of security phase of the data collection produced 17 files of organisational security information added to the theoretical security knowledge and separate security reports on the security situation of the MOD. All data was collected from different perspectives and sectors of organisational security as shown in section 4.2.

The definitions of the learning organisation have been based on the ideas of Chowdhury (2003), Sarala (2001) and Alasoini (1999). Sarala and Alasoini can be found behind the trends and the concept of the learning organisation produced by the Government. The Government and its guidelines have been used as a framework for this study because the MOD is a sub-organisation of the Government. The strategic planning perspective follows the ideas of Paris (2003), Niven (2003) and Koistinen (2002). Kaplan and Norton's (1996) model of the Balance Scorecard (BSC) is applied as a tool, which is recently introduced to the MOD. The systematic literature analysis process as an element of the data analysis process of this research is demonstrated in Figure 21.

Figure 21. Systematic literature analysis process.

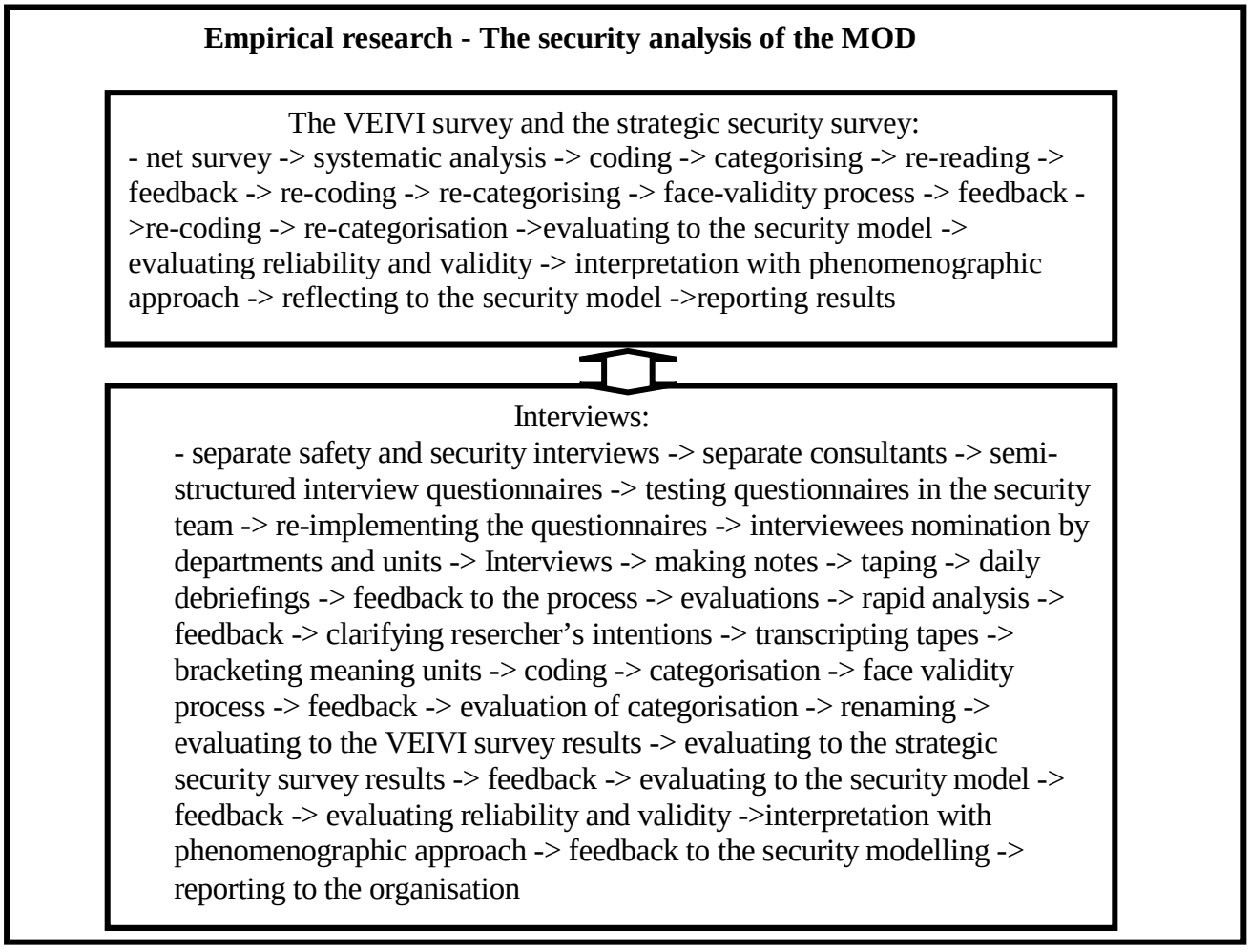


Previous research (Krogars 2001; Väänänen 2003) had collected data for security and thus re-evaluation of this study was intensively linked to the re-organisation process of the MOD. Empirical data collection with surveys and interviews is applied in the following paragraphs.

6.5.3 Empirical inquiry in the MOD

The possibility to use the VEIVI -survey supported the decision making of the process. The need for a security survey emerged due to directives (VAHTI, 1/1999) linking it to the reorganisation of the MOD, as also shown in Figure 20. The MOD conducted the Security Analysis (VAHTI, 1/1999) according to the procedure defined by the Ministry of Finance (MOF) in the VAHTI directives (www.vahti.fi). In practice the aim of this survey was expanded from the pure technical and physical security to include the overall security development of the MOD. This process is not appropriately guided and, thus, modification for the needs of the MOD was possible. (Puolustusministeriö, 2004h) Figure 22 clarifies the empirical analyses procedures.

Figure 22. Empirical analyses procedures.



6.5.4 Conducting the VEIVI survey

The VEIVI safety and security survey system (Turvavironen, 2003) analysed the MOD its everyday settings in May-June 2003, attempting to interpret its security status in terms of the meanings people bring to it. VEIVI is an abbreviation from the name of it's inventor, Veijo Vironen, and its meaning in Finnish infers to a crank with which one can start an engine or some other process. The VEIVI survey is also governed academically by a phenomenographic approach. Like in the phenomenografic literature (Marton, 1981, 1994; Marton & Booth, 1997) short freely written statements were accepted in both the VEIVI survey and the strategic security survey. This method was applied to determine the conceptions of the security of the personnel of the MOD. The survey consists of 22 statements, which are divided into five sectors. Those sectors are security policy of the organisation, security culture, security regulations, security control, and information security. The responses to these statements were collected on a scale from one to five:

1) strongly disagree with the statement
2) somewhat disagree with the statement
3) undecided
4) somewhat agree with the statement
5) strongly agree with the statement

Every statement offered an opportunity for the responder to insert his/her own comments. The last statement in the questionnaire was reserved for free personal comments, information and feedback. The statements of the questionnaire and five sectors of the VEIVI survey are shown in Appendix 1. In the MOD (N=124) 47 % (N=58) of the personnel responded to the survey. Some participants only partially responded and thus the number of responses per statement varies between 56 and 58 people. The results of the responses are reported in the next chapter.

Using the Intranet of the MOD the commercial source VEIVI net survey was modified in order to promote its usability for the whole Government, and was expanded for possible future use in the state administration. The questionnaire was modified for the MOD two months in advance. The personnel (N=124) were informed via the Intranet four weeks prior the survey. The MOD downloaded the questionnaire on its server, and simultaneously created a file for the data. The Information Technology (IT) security personnel of the MOD downloaded the material, checked the programme, and piloted the functioning of the programme and the functioning of the survey on several randomly chosen workstations. After the survey the IT security personnel downloaded the answers to a disk, and delivered the disk to the commercial source. The functioning of the answer records was evaluated immediately when the survey started, and the IT security personnel any repaired minor faults. The period for responding to the survey was two weeks.

All personnel (N=124) were sent an e-mail message via the server inviting them to complete the questionnaire. A link on the e-mail launched the survey, which could be completed online. After completing and closing the link the answers were recorded straightaway and automatically to the survey file in the server. The survey programme produced a coded answer and recorded the answer in cryptic form to the server. The MOD received the results of the survey from the contractor both electronically and on paper one week after sending the disk.

6.5.5 Conducting the strategic security survey

The following strategic level security survey design and questions are based on the similar theoretical, academic and methodological framework as the VEIVI survey. This phase of the survey is a part of a study conducted in the MOD to gain first impressions of the personnel concerning the con-

tinuity of the reorganisation process of the ministry launched at the beginning of 2002. From the questionnaire (Väänänen, 2003) questions concerning strategic security were revised. The statements of the questionnaire are in Appendix 2. In the MOD (N=124) 40 % (N=50) of the personnel responded to this survey. Some participants only partially responded and thus the number of responses per statement varies between 44 and 50 people, because 12 percent of the participants did not want to reveal their personal information, nor respond to all parts of the inquiry. The responses to these statements were collected on a scale from one to five such as in the VEIVI survey. The response results are reported in the next chapter.

For this research nine statements and one open question that are tightly connected to the security of the MOD were chosen from the total survey consisting of 60 statements and seven open questions. The open question offered the opportunity for free personal comments, information and feedback. The reasons for using existing material are: the content of the questions are relevant with this study's goals; the timing of this survey is appropriate for the study entity; the questionnaire and this study share a similar basis with a five year research tradition in the MOD; these questions add value to this study; the analysis of this data deepens understanding of the object, and deepens the study's results; this data broadens the perspective of the MOD administration to the strategic level needed for this study; and it takes advantage of the previous findings of the personnel of the MOD, who are tired of surveys due to a five year development process. The survey itself was conducted with a questionnaire delivered to all personnel (N=124) and responses were requested within two weeks. The responses of the questionnaire were analysed by the public Statistical Package for the Social Sciences (SPSS) program. The study is published in the MOD Internet web site (www.defmin.fi).

6.5.6 Conducting the interviews

Semi-structured interview methodology was chosen because the existing philosophical and methodological alteration of knowledge about the personnel interaction situation makes it possible for the researcher in the MOD to go beyond the contrasting alternatives of uncontrolled case reports. The phenomenografic literature assumes that the use of interviews is the appropriate method for obtaining an account. (Marton, 1981, 1994; Marton & Booth, 1997) Thus, this is likely to be the most proper means of gaining a detailed account of the real-life world of the MOD staff.

Departments and individual units were requested to select a total of 20 interviewees (Puolustusministeriö, 2004h) and to inform of their selection no later than the week prior to the interviews. All interviews were scheduled within a calendar week. None of those departments or individual units requested informed their candidates within the time period of the request. The only exception was the Permanent Secretary, with whom the procedure varied s that the interview time was checked in advance with his secretary and then scheduled. After re-requisitioning with a random sampling just before and during the interview on week 21 interviewees were gathered. For continuance and comparability reasons the categorisation of the interviewees is the same as in previous research (Krogars, 2001; Väänänen, 2003). The number of interviewees, split into categories by their position in the organisation, is presented in Figure 23.

Figure 23. Interviewees in categories.

Category	Department/Unit								Total	(%)
	Top management	SSDC	DPD	APD	RPD	AU	IU	AUDU		
Leader	1			1		3			5	23,3 %
Expert			2	2	3	3		1	11	53,4 %
Others					1	3	1		5	23,3 %
	1	0	2	3	4	9	1	1	21	100 %

The interview data collection was separated into safety and security interviews. The semi-structured safety questionnaire is shown in Appendix 3. The number of safety interview participants split into categories by their position in the organisation is presented in figure 24.

Figure 24. Participants of safety interviews in categories.

Category	Department/Unit								Total (F)	(%)
	Top management	SSDC	DPD	APD	RPD	AU	IU	AUDU		
Leader						2			2	20,0 %
Expert			2	1	1	2			6	60,0 %
Others					1	1			2	20,0 %
	0	0	2	1	2	5	0	0	10	100 %

The semi-structured security questionnaire is shown in Appendix 4. The number of the security interview participants split into categories by their position in the organisation is presented in Figure 25.

Figure 25. Participants of security interviews in categories.

Category	Department/Unit								Total	(%)
	Top management	SSDC	DPD	APD	RPD	AU	IU	AUDU		
Leader	1			1		1			3	27,3 %
Expert				1	2	1		1	5	45,40 %
Others						2	1		3	27,3 %
	1	0	0	2	2	4	1	1	11	100 %

The organisational procedure aimed at selecting participants so as to avoid pre-suppositional influence about the nature of the phenomenon, or about the nature of conceptions held by particular types of individual. However, whether departments or separate units used common-sense precautions, or maintained a variety of experience, or used any other reason while selecting their partici-

pants was not investigated. Selection of the interviewees on the volunteer basis was the only pre-demand for the selection of the interviewees.

Due to the sensitivity of the security issues in the MOD consultants were selected for the interview process. The position of the researcher as the Head of Security of the MOD and as an operational actor can have both a positive and negative effect on the interview situations. Thus, consultants were used to conduct the interview processes to achieve more neutrality. These procedures also increased the reliability and validity of the interviews. Three consultants were used for the safety interviews and one consultant was used for the security interviews. The consultants' competence, both academic and their competence on security were confirmed from three different sources because their reputation for professionalism was the basis for their selection. All of the selected consultants accepted the request and share the respect of the main security partners of the MOD, the security department of the Government and the security department of the Finnish Defence Staff (FDS). All of the consultants used have the top-level of Finnish theoretical security education and several years of practical experience in the field of security surveys in the public and private sectors. Interviewing and a short reports were expected of consultants, but it was the researcher who thoroughly analysed the data collected.

One criterion for the qualification of the consultants was age seniority, because the average age of the personnel of the MOD year 2004 is 44,4 years, and because the consultants had to hold an equal physical seniority level with the top management of the MOD. The seniority of the consultants not only aimed at guaranteeing the quality of the consultants but also helped to achieve the trust and confidence of the interviewees. This is a very important aspect, especially, with the interviews of the top leaders of the MOD, such as the Permanent Secretary.

Semi-structured interview questionnaires were prepared together with the consultants on the bases of the VEIVI survey and strategic security survey results. Preparations were made separately with the consultants concentrating on the safety interviews on rescue and occupational health and safety issues and for the security interviews on the security leadership issues. The Security Team of the MOD tested both questionnaires in advance. After testing, only minor changes were needed to complete the questionnaires.

The data was collected with semi-structured interviewing, with a time limitation of one hour per interview during normal office hours. The researcher took part in all of the interviews, taped them, and made notes on paper. The consultants were responsible for the conversation because the researcher, as a participant of the organisation, was, during the preparations, considered to be too close to the interviewees. Nevertheless, the principle of allowing maximum freedom was agreed on for the participant to describe his or her conceptions and experiences of the matter at hand. This principle aimed at obtaining the most appropriate means of getting an account, because in obtaining experiential accounts the participant is given the maximum opportunity to reflect. Thus, the questions posed followed the flow of the interview situation, and emerged out of the interviewees' interests to clarify their experiences, and were not based on the researcher's presumptions.

The interview practice noted the interviewee's perspective, experience and conceptions and at the end of every interviewing day the interviewers debriefed the structure, content, context and results of the day. The idea of these debriefings was to act as an ongoing review of the interviewers' skills and the interview practice. Another aim of these debriefings was to evaluate the questions used but no dramatic changes were needed.

6.6 Analysis process

In the data analysis the research object and the MOD was studied both inductively from data premises and deductively from the strategic security conception system. The data was evaluated using systematic analyses and the phenomenographic approach as shown in Figures 21 and 22. The aim of these processes was to find the explicit messages, expressions of the documentation, and also hidden messages. It is here the experience, knowledge and security skills of the researcher are used, in the interpretation of the hidden messages.

The data collection procedure presented in Figure 20 can be analysed from the perspective of Figure 3 (Boyatzis and Taylor, 2003, p. 231) so that with continuous feedback and interaction procedures: (a) knowledge from data analysis is a transformation process, being continuously recreated, (b) collecting knowledge from data is not an independent entity to be acquired (c) the process emphasises learning as opposed to outcomes, (d) learning transforms experience in both its objective and subjective forms, and (e) lead the critical learning process of the development of security.

6.6.1 The VEIVI survey analysis

The VEIVI survey analysis is described in Figure 22. The analysis process was launched after receiving the raw data by coding the data according to the five sectors of the VEIVI survey and by continuing the analysis of the categorised material. Continuously re-reading the data along with the analyses processes forwarded straight feedback on both sides, and brought the categorised more towards those described in the security model compared to the VEIVI survey. After repeating this process, the face validation with the experts of the security sector in the Government and with the

inventor of VEIVI the researcher's confidence was increased about the reliability and validity to the analyses processes. With feedback from face validation, evaluation of the re-coding and re-categorisation forwarded the process to reflection on the security model (presented in chapter 7).

In the VEIVI survey analysis was divided into five security sectors; personnel security, physical security, information security, occupational health and safety, and organisational security policy. These sectors and the questionnaire are presented in Appendix 1 with the statistics in Appendix 2. Interpretations of the results with the phenomenographic approach's implemented findings are reported separately to the organisation for use in the planning and decision making processes. Thus, the idea of changing the security of the MOD and learning from security as described was fulfilled with this analysis process. The results of the analysis process are presented in chapter 7 combined with the results of the other elements of the Security Analysis of the MOD.

6.6.2 Strategic security survey analysis

The strategic security survey analysis procedure was the same as the process of the VEIVI survey. Thus, since the VEIVI survey analysis was detailed in the previous section only the differences of are reported here. The coding and categorising processes more and more revealed the need for strategic level analyses, and created general categories suitable for modelling strategic level security better than the categorisation of the strategic security survey itself does. At an early stage the analysis process added value for both modelling security and developing the security of the MOD. After having analysed the raw data, face validation was conducted with the experts of the security sector in the FDS. The findings were reported separately. Thus, the VEIVI survey analysis influenced this analysis, and these together influenced the findings for the preparations of the interviews. Both of

these analyses were presented to the Committee of Readiness of the MOD and to the Security Team of the MOD for feedback and comments, and to increase interaction, and expand the number of personnel involved in the security development of the MOD.

The strategic security survey analysis is divided into four security sectors: capability to respond to threats, capability to react in a crisis situation, comprehensive national defence, and capability for rapid changes within the organisation. The analysis process background information follows the categories Krogars (2001) presented in Appendix 2. In the analysis of this research perspective to respond to change of threats was reconstructed and compared to the aim of the process of reorganisation in the MOD to get the organisation to more actively follow the changes in the environment and to be more prepared for rapid change response. The capability to react in crisis situations was compared to the status of the MOD and to the tasks of the ministry as one of the key players in such situations in peacetime, but especially in the worst-case scenario, in other words, a military attack. Statutory tasks of the MOD, as a part of the Government, are to maintain readiness and to make preparations for leading the national defence of the nation in extreme situations, in wartime conditions. In terms of comprehensive national defence one of the main intentions of the ministry's reorganisation process was to be more closely linked to the Finnish Defence Forces (FDF). The results of the analysis process are presented in chapter 7 combined with the results of the elements of the Security Analysis of the MOD.

6.6.3 Interview analysis

The interview analysis process is presented in Figure 22. The analysis process was already launched during the interviews. The principle of allowing maximum freedom for the interviewee to describe

his/her conceptions and experiences about the matter at hand aimed at obtaining the most appropriate means to get an account, because in obtaining experiential accounts the participant is given the maximum opportunity to reflect. Thus, the questions posed followed the narrative of the interview situation, and brought out the interests that clarify the interviewee's experiences, not those based the on researcher's presumptions about the issue. On the other hand, a paradox exists, because without the researcher's pre-information, presumptions, and personal experience it is challenging to be able to focus on the core of the phenomenon. Another problem is the tendency of the interviewer to dominate and control the interview practice, and the situation, and not to adequately follow and interpret the participant's responses, or to fail to follow through on the participant's responses.

After the interviews the researcher transcribed all of the taped interviews for a deeper analysis of the information. In the phenomenographic approach, according to Kvale (1996) research analysis of interviews tend to be transcribed verbatim prior to analysis. However, transcription is not necessarily a neutral process, but much more than a mere clerical task. Transcription raises methodological and theoretical challenges, and thus the transcription procedure was followed as verbatim as possible in the interview practice. Thus, the transcription process consciously avoided, for instance, such things as stylistic traits, and minimised the tendency to foreclose description.

After the transcription feedback stimulated recall was requested. From all of the (N=21) interviewees 62 % (n=13) responded to the request for stimulated recall with there only being a few minor corrections made in the transcriptions. This phase aimed at raising the credibility and conformability of the survey, at giving feedback to the interviewees, at increasing interaction between the interviewees and the researcher, and at expanding awareness of the strategic security of personnel. Nevertheless, the author as the researcher felt he belonged to the MOD organisation, not as an outsider, but as a participant and as a learner. Thus, the social constructivist learning and knowledge ap-

proach (Patrikainen, 1997; Vesalainen & Strömmer, 1999) servers as a bridge between social interactions with fellow participants. Both content orientation and context orientation emphasises interaction between theory and practise where the past, present, and future, all have their own horizons and dimensions with the relativist concept of knowledge. Theoretical and methodological paragraphs have illuminated this in more detail.

With emphasis on analysis of the transcription including anything that is likely to affect the interpretation of the meaning (Svensson and Theman (1983) the tapes were listened to several times during the initial analysis, rather than analysing the transcripts directly. The transcription phase was separated from the analysis phase in that the transcription stage was purely transcription. On the other hand, the analysis phase included anything that was likely to affect the interpretation of meaning, and this aspect separated the analysis process from the transcription process. That is why transcriptions are as verbatim as possible, and in the analysis phase tapes were listened to several times to find anything likely to affect the interpretation of meanings. In this phase coding, categorising, and interpreting with empathy were applied to re-transcription.

While analysing, re-reading, coding, categorising transcripts, and discussing their conformability the multiple layers of meaning that were revealed in the embodied inter-relations were emphatically listened to. The kind of knowledge obtained in such interviews goes beyond the explicitly formulated verbal dimension to encompass tacit knowledge. Much of the knowledge is based on intuition, empathy, and listening, (Kvale, 1999). Information is also provided by facial gestures and body postures, and is systematically employed with character analysis.

6.6.3.1 Bracketing meaning units of the interviews

After the transcription process and the stimulated feedback of the interviewers the analysis process followed the guidelines set forth by Strauss and Corbin (1990) because bracketing may be an even more difficult issue than the interview when it comes to respecting the process of the interviewee's reflection and, thus, issues of personal morality arise. In order to more properly hear the interviewee the researcher clarified his own intentions, bracketed the value basis of orientation, and gave his line of thought backed up by his judgements. These demands raise awareness of the warning signs that the researcher's personal beliefs and knowledge may be intruding.

To enhance the value of this significant part of the research analysis process two academic security experts were used for the face-validity approach. Two academic experts with years of theoretical and practical experience in security re-bracketed the transcriptions. On purpose the personal attitude of the first one was negative towards the wide range security approach and supported the realistic theory of security. The other expert had a positive attitude towards the wide range model of security, similar the philosophy of this study. However, neither of them personally participated in the interviews but only used the transcriptions and tape recordings as sources while they together analysed the data.

The emphasis was on the analysis of meaning units and bracketing was to count anything that was likely to affect the interpretation of meanings (Svensson & Theman, 1983). Therefore, it was useful to listen to the tapes several times during the analysis rather than to analyse directly from the transcript. In such a face-validity case as this, this was particularly important because the face-validity experts analysed the transcripts without being the interviewers. They were made aware that while bracketing and interpreting the data they had to avoid indications where their own assumptions,

rather than the experience of the interviewee, may have been directing the bracketing. Such potential warning signals as the feeling of impatience, or the perception of that the bracketing practice was being guided according to one's own beliefs were noted when these issues where self-evaluated in the three process briefings with the experts. Briefings concerned the status of the re-transcription process, content, context and the evaluation of the data. Additionally, lively, even rigorous, random conversations were shared during their analysis process. However, both experts were aware of the possibility, so when this phenomenon was evaluated in briefings, it was kept under control. The face-validity results were highly equivalent to the bracketing results and the dependability and so add to the transferability of the results of this inquiry.

Developing an empathic attitude while jumping into the flow of thought of the participants sensitised the researcher to the experience of the participants. Wertz (1983) suggests that the initial analysis of interviews might be devoted to a "sensitisation". From the very beginning the intention was to focus on the thinking and conceptions of the participants. In the beginning of the analysis process transcriptions were split into "meaning units" (Karlsson, 1993) identifying the shifts of meanings as a particular turning points. Marton (1994, p. 4428) entitled this process "bracketing". Identification of the meaning units emphasised the intention to concentrate on the data, and jump into the transcription, and listen to the recorded interviews. During analysis it became obvious that there were points of focus that appeared to be central to the experience recounted by the participants. These points of focus where related to other aspects of the experience of security and learning about security.

Repeated listening and reading of the data at hand produced individual pictures of the interviewees. These became obvious when jumping into the participants thinking and experience, and while seeking similarities and differences from the experiences. This proved to be an important tool for devel-

oping empathic understanding, as also interpreted by Karlsson (1993). On the other hand, this comparative process draws the researcher nearer and nearer to a new narrative as a result of the interviewees' narratives. This means that the result of the interview phase of the study was a narrative of the security model, in other words the strategic security model presented in chapter 7. Especially the content of the meaning units of the model sectors have risen from the data during the analysis process as described in the next chapter.

The analysis produced results in the orthodox way of phenomenographic findings, and does justice to the participants' experience. Intentional counter arguments aided in finding the meaning units and in incorporating the descriptions by the interviewees into existing theoretical structures by looking for discrepancies, or emphasising differences and details, as well as by debating with experts and professional colleagues.

The first stage of the analysis process consisted of repeatedly reading the transcriptions, listening to the tape recordings, bracketing the meaning units, establishing mental pictures of the interviewers, coding and categorising the descriptions and continuing the bracketing of the categories in more detail. Three findings were bracketed: meaning units of threats to the MOD, five assets to be secured, and six key meaning units of security. These findings are described in the next chapter.

6.6.4 Deliberation

The idea was to view the data in a new light. During the three year process traditional phenomenographic methodology was used. This included writing summaries, a total of 14 different reports from the previous process and three different reports from the interview data, as well as, looking for

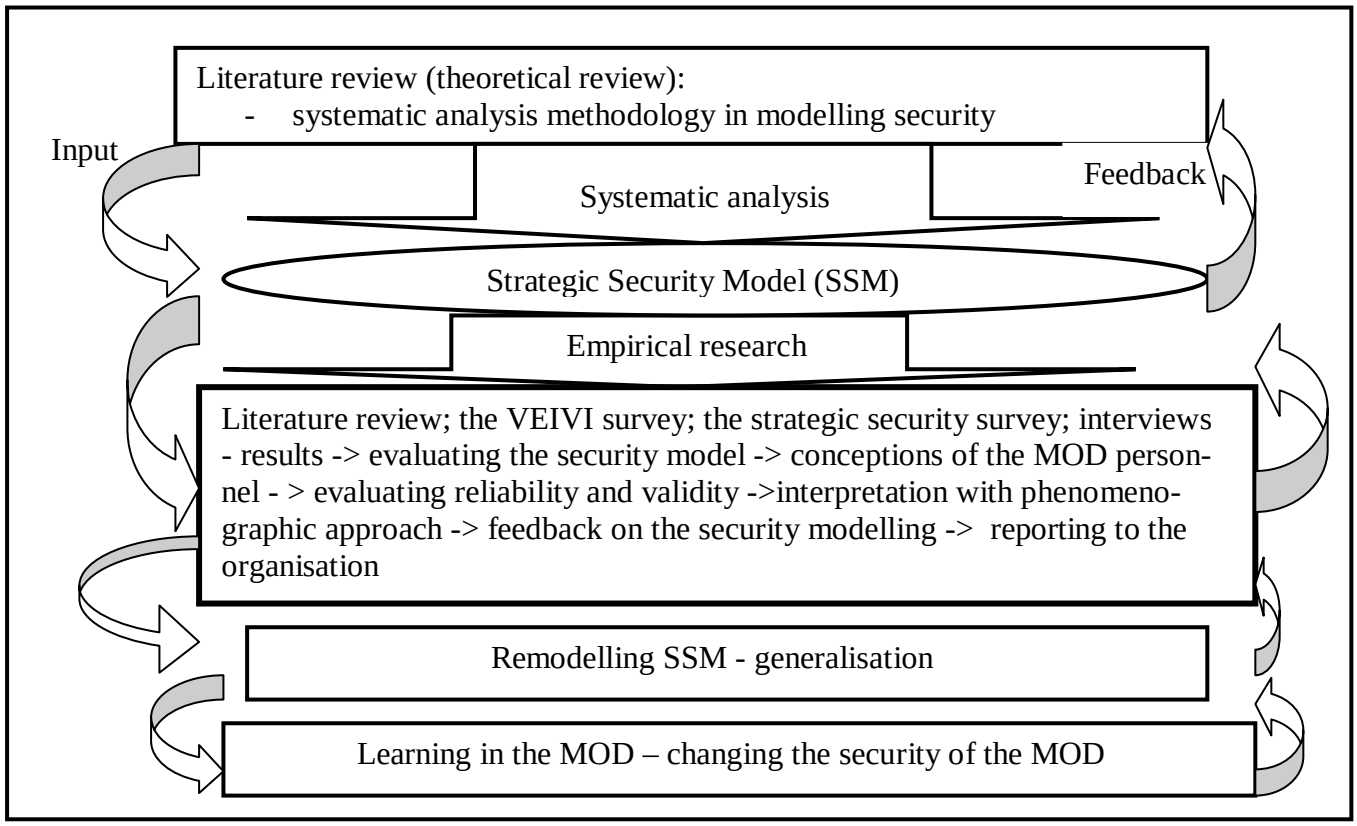
commonalities, differences and for some surprises. Additionally, a variety of different imaginary roles in the process of listening to interviewees, or reading transcripts were adopted. The role of researcher according to the relativistic approach, the role of researcher according to the critical security approach, the role of desk officer in all three departments of the MOD, and the role of military officer from the FD, international affairs were all taken and different features from the data were searched out. The data was reflected upon through self-interrogation, the research participants' experiences were written, and pictures on paper, sampling them in different, unordered ways, were drawn. This study's analysis had ecological relevance because the phenomenon was studied in the natural context that as it appeared in reality.

However, the most stimulating way of reviewing the data was to engage in conversations with expert colleagues and, especially, with the academic experts, who bracketed the interviews data. This form of teamwork, on the basis of this experience during and after the analysis process, was the most inspiring experience. As a whole, the use of a variety of techniques and the possibility of using different approaches to view the data was a value in itself. The results of this analysis process are presented in the next chapter.

7 RESULTS OF THE STUDY

The results are reported in this chapter. The outcome of this study is a combination of the elements of the study linked together like clusters. The organisational parts connected to security issues bridged active interaction between the MOD staff and the researcher. Because of this interactive entity the procedure has not been linear and, thus, describing the results does not strictly follow the order of the research questions. The results of the analysis of the separate study are reported in this chapter. The results are discussed in the order of the study questions in chapter 8, which already include interpretations and reflections of the previous parts of this report while modelling security. The process of implementing the results is presented in Figure 26.

Figure 26. Process of implementing results.



7.1 Constructing the security model

The context of this study comes from the Ministry of Defence (MOD) as a part of the Government with its status in European and Finnish society. The MOD participates in the development of the state administration that includes conceptions of learning, security and other strategic level features. The impact of the internal strategic perspective and, on the other hand, the organisational operational level approach shows a dualistic approach, that of strategic and operational levels to the report of this study. The capabilities of learning to learn are key elements in future organisations also from the security perspective.

The first finding was the perception that the task of the MOD applies to both strategic and operational levels, on an international level and in society, and also in the organisation. These levels are strongly integrated. This finding became stronger the more previous research, the theoretical background of security, international and national literature and governmental normative material was reviewed.

Four aspects clarify the first finding. First, increased internationality, and international requirements of security demand a dynamic approach to the concept of security in Finland and, thus, changing the traditional concept of security in Finland and in the defence establishment is necessary. Second, the impact of security is horizontally breaking boundaries and security does not confine itself within national state borders, instead it influences all sectors of society and the defence establishment as well. Thus, the division between internal and external security is artificial, and the trend is towards a wide-range comprehensive strategic concept of security. The new ideas of Cohen (2002, pp. 13-20) and Kaldor, et al. (2004) support this analysis, even though they use the term human security. Third, technical information security (www.mintc.fi) has lost its status as a separate driving actor of

security to the trend for comprehensive operational security. Fourth, security is more increasingly becoming a crucial factor of international and national competitiveness, which links security to the success factors and principles of a learning organisation and makes strategic planning one of the change actors.

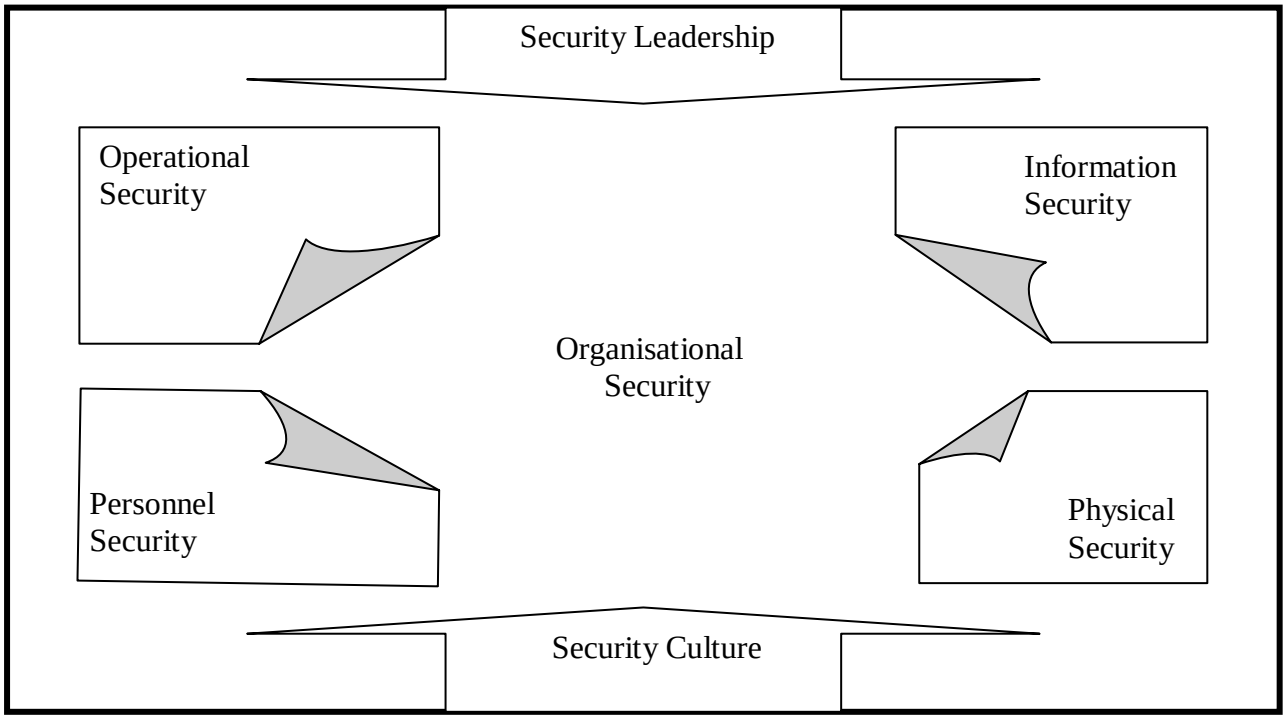
The second finding was that there is a need for a new security model. Since making the individual the object security issues have gained some prominence in debates over the nature of organisation theory. Nevertheless, the individual humanistic perspective has made little impact on academic security studies. As a result, attempts to rethink the notion of security and to clarify the needs for a new security model Walker focuses on in a text:

> "Uncertainty of certain things is, of course, precisely the problem. For in the end it has never been possible to pin security down to concrete practices or institutions with any gear precision, no matter how insistent the voices of military and defence establishments might be. The whole point of concepts of security that are tied to the claims of state sovereignty is that they must expand to encompass everything within the state, at least in its ever potential state of emergency. So, in this context, broadening the concept as such is not really the problem; difficulties arise only with the kind of broadening that is envisaged" (Walker, 2003, pp. 75-76).

Modelling security helps people to understand the meaning and content of the term. On the basis of the previous chapters it became apparent that none of the security models described in the theoretical part of this study, in chapter 4, comprehensively met the demands for the security of a learning organisation. None of the security models fully responded to the new threats from the changing security environment as is necessary in the 21st century. Neither do they particularly consider the Government strategic level, and the MOD as its subordinate organisation, which simultaneously

operates on strategic and operational levels. As a response to the need for modelling comprehensive security on the basis of the literature review and theoretical studies, the conclusion for the structure of organisational security in *the Strategic Security Model* (SSM) is shown in Figure 27.

Figure 27. Organisational security in the Strategic Security Model (SSM).



Epistemologically, to understand security from a broader perspective means to look at the ways in which the objects are to be secured, the perceptions of threats against them, and the available means of securing them, both intellectually and materially. This has shifted over time. The term strategic in this context refers to the learning by the executives and the top-level leadership.

Security culture signifies the values, attitudes, committed and professional personnel and up-dated norms and directives. Security culture includes goal-oriented operations where a person's self-assessment supports the total security of the organisation. The organisational security culture is a

coalition of individual and group values, attitudes, perceptions, skills and behaviours. Previous parameters define what the attitude towards security management is, and how security leadership is conducted in an organisation and how successful, in practice, security is in an organisation. Communication is based on the common trust and understanding of the meaning of the term security, as well as, on a belief in the effectiveness of predictive security. These are the characteristics of an organisation with a good and successful security culture.

Operational security includes all those actions that detect, evaluate, identify and counter threats and risks that jeopardise the fulfilment of the mission. Operational security reduces the likelihood of faults, accidents and negative consequences. The emphasis is put on the actions that follow national and international principles of good governance. Confidentiality, integrity and availability of information are protected against risks and threats caused by malfunctions of electronic equipment, system disturbances, or against natural disasters and environmental accidents. Protection is also needed against different kinds of abnormalities, be they intentional or by accidental that may result in the materialisation of risks or threats.

Information security means the proper protection of information, systems, services, and electronic and hardware in normal and in emergency situations. The measures used are both functional and technical. Information security includes all those functions that guarantee information, either produced within the organisation or from outside the organisation. That data must be reliable, confidential, continuous, complete, and accessible to authorised users with the principles of meeting the security objectives of confidentiality, integrity and availability. Information security and the security of information material is a concern of all personnel for its entire lifespan. It includes the secure handling of information and arrangements for the training of all personnel on the contents of the instructions for handling information.

The aim of *physical security* is to secure high security-level buildings where security control is a part of the organisation's core tasks. Declarations, permits and certificates concerning security are the responsibilities of the head of security and these and other statutory certificates are documented in one common register. Physical security includes the control of visitors, controlling the movement of one's own personnel, physical surveillance, technical surveillance and security equipment, building protection and special facilities. *Personnel security* means measures to reduce personnel-related risks, and to protect key personnel against threats and to secure operations and actions so that the threats against one's own personnel are minimised.

The MOD was a relevant subject for an empirical survey of security from the point of view of the SSM. The analysis of the literature review showed that the MOD has two overlapping security sectors. The first is the strategic level, which includes international security issues and requirements, the national state legislation, the normative security level as a part of Finnish society, and the defence establishment security guidance perspective. The second is the operational level, which includes security issues inside the MOD organisation, co-operation within the Government and co-operation with partners such as the FDS.

Changing the focus of security to the individual in the SSM paradoxically allows an appointment with the broadest global threats. Humanity arises as an issue when discussing treating individuals as decent persons, as citizens, or members of society, or as members of a global community. Making individuals as persons the object of security opens up the podium for critical scrutiny. Focusing on individuals as citizens illustrates a central dynamic in contemporary life. Directed threats to persons can move towards from the institutions of organised violence of their own state. A person as the object of security treats individuals as members of a human community with ordinary global concerns. Thus, the SSM serves both strategic and operational levels of an organisation.

In organisational security the SSM leadership refers to the organisation's comprehensive leadership. Security leadership is a natural part of an organisation's leadership, and it is adapted to the organisation's finance, operations and objectives and puts a special emphasis on identifying threats and risks. Leadership works out programmed actions supporting an organisation's strategy, policies, principles and operations.

As the model was purely theoretical it was tested in the MOD. The security analysis (Puolustusministeriö, 2004) process was applied as a tool, which had an instrumental role for this model developing process. The model was evaluated through the conceptions of security of the personnel, because in the construction phases of this SSM it had already been internationally compared to the European Union (EU), The North Atlantic Treaty Organisation (NATO), The Organisation for Security Co-operation in Europe (OSCE) and the Organisation for Economic Cooperation and Development (OECD) standards, in the national VAHTI directives (www.vahti.fi) and to Finnish national safety and security legislation. That is why conceptions of the MOD personnel are important in this study as well as in developing the process of the security of the MOD. Thus, the findings of the empirical study are reported in the next section and in the next chapter the interpretations of the findings are discussed. The following remodelling has been made as a result of the previous empirical inquiry, security surveys and interviews, and the findings of the conceptions of security of the personnel.

7.2 Conceptions of security of the personnel of the MOD

In this section the findings are reported from the perspective of the SSM. However, this phase of the construction process emphasises the value orientation of the MOD, tasks of the MOD and the Government framework as a part of society added to the previous chapter's theoretical analysis. The

questionnaire for the VEIVI survey is in Appendix 1 and the questionnaire for the strategic security survey is in Appendix 2. The statistics of the responses are presented in Figure 28.

Figure 28. Statistics of the responses

N=58+50=108	SCALE					
ITEM	Strongly disagree	Somewhat disagree	Undecided	Somewhat agree	Strongly agree	SUM
Security policy	9	20	68	66	11	174
Security culture	4	10	23	107	204	348
Security instructions	25	76	118	68	0	287
Security control	12	46	83	86	58	285
Information security	5	29	50	62	25	171
Respond to threats	11	42	62	32	3	150
React in crisis situation	3	43	28	15	11	100
National defence	7	45	55	28	15	150
Capability for changes	0	13	25	8	4	50
Total	76	324	512	472	331	1715

The most positive and encouraging finding of this study was the enthusiastic attitude of the personnel of the MOD expressing a strong motivation for improving the security system in the MOD. This finding was clearly visible in the VEIVI survey results when the strategic security survey and when the interviews were analysed. This provides an excellent opportunity for a successful security development process. One positive indication of the enthusiasm about the security issues was the response percentage of 47 % (N=58) for the VEIVI survey. Academically, this percentage is low, but in the especially passive and traditional cultural heritage of the security of the MOD it is good. With enthusiasm for security issues the interview results particularly expressed challenging expectations for the change process regarding security of the MOD. However, despite this crucial finding this research's interpretations are challenged by inertia towards the security of the MOD and the results of this study revealed a great deal of complacency. The situation from the research point of view is

interesting because, paradoxically, the study results show several discrepant situations, both on the strategic and operational levels. An indication of discrepancy from the previous positive result was the starting process of the interview week, when none of the departments or individual units reacted to the request signed by the Permanent Secretary.

The strategic security survey (N=50) results showed a trend for participation of the personnel of the MOD, and as it is the same in different parts of the entire inquiry it allows the possibility of generalising. Therefore this statistic is not repeated again. The results showed that experts (43 %) constitute the largest group of personnel (mode [Mo]=2; median [Md]=2) (Heikkilä, 2004, pp. 84-89) in the MOD and 60 % have a Master of Arts degree of education (Mo=4; Md=4; mean=3,5). The Administration Policy Department was most active (31 %) in responding (Mo=1). Of the personnel 58 % have served over 10 years in the MOD (Mo=5; Md=4), and 35 % for less than six years. The statistics of correlations for both the VEIVI survey and the strategic security survey are presented in Figure 29.

Figure 29. Statistics of correlations.

	Security policy	Security culture	Security instructions	Security control	Information security	Respond to threats	React in Crisis situation	National defence	Capability for changes
VEIVI survey									
Security policy	1								
Security culture	-0,38	1							
Security instructions	0,73	-0,89	1						
Security control	0,92	-0,01	0,44	1					
Information security	0,95	-0,23	0,56	0,91	1				
Strategic security survey									
Respond to threats	0,66	-0,91	0,99	0,36	0,47	1			
React in crisis situation	-0,09	-0,87	0,58	-0,46	-0,22	0,64	1		
National defence	0,47	-0,94	0,93	0,14	0,24	0,97	0,76	1	
Capability for changes	0,57	-0,78	0,90	0,33	0,30	0,93	0,53	0,94	1

The results in Figure 29 show that security control and security culture in the VEIVI survey have low correlation (Pearson correlation=-0,01) and security policy in the VEIVI survey has no correlation to reaction in a crisis situation in the strategic security survey (Pearson correlation=-0,09). On the contrary, security instructions in the VEIVI survey have high correlation with responding to threats in the strategic security survey (Pearson correlation=0,99).

7.2.1 Conceptions of the operational level security

The operational level security results are analysed from the VEIVI survey. Results of the VEIVI survey (N=58) showed that the security policy of the MOD was clear or partially clear for 34 % of the respondents (n=26; Mo=3; Md=3). A total of 45 % (n=32) thought that the security principles of the MOD were not clear or that there is a lot to do to make them clearer. The results showed that 90 % (n=52) were satisfied with the current security culture and thought that it is everyone's business to see to the security of the workplace (Mo=5; Md=5). The statistics on the results of the VEIVI survey are presented in Figure 30.

Figure 30. Statistics of the VEIVI survey

N=58	SCALE						
Item	Scale Sum	Mean	Standard Error	Standard Deviation	Mode	Median	Reliability
Security policy	174	3,32	0,12	0,88	3	3	0,96
Security culture	348	4,45	0,11	0,8	5	5	0,87
Security instructions	287	2,8	0.12	0.88	3	3	0,93
Security control	285	3,51	0,14	0,83	4	4	0,88
Information security	171	3,49	0,12	0,9	4	4	0,89
VEIVI	1265	3,51	0,12	0,85	4	4	0,90

Three percent (n=2) considered security to be mainly the matter of the security personnel. An important finding from the results was that 97 % (n=56) were either completely ready or at least ready to a great degree to change their habits, if reasonably required for security reasons (Mo=5; Md=5). The results showed that 71 % (n=40) thought that there is hardly any control or that they were not certain whether or not the personnel were following the security instructions. The results showed that six percent (n=3) responded that there is no control over following security instructions in the MOD (Mo=4; Md=3). The results revealed that 41 % (n=24) held that the methods are not clear enough, but that there is some kind of system in the MOD for claiming and reporting, while 43 % (n=25) thought that there is no clear claim and report system for perceived abnormalities and compromise of security.

The results showed that no one stated that personnel receive sufficient security education and training, or that security information would be well directed. Consequently, 35 % (n=20) answered that there is no security education and training in the MOD and that they have received very little information on security issues (Mo=4; Md=3).

The results revealed that 72 % (n=41) believed that outdated classified documents are demolished quite safely (Mo=4; Md=3). Two percent (n=1) considered to master the information security instructions of the MOD. However, 67 % (n=38) only somewhat knew the information on security instructions (Mo=3; Md=3). There were no great differences between means, standard errors of the means and standard deviation, thus the data is significant. Information security was the greatest concern of the open questions and the written feedback mostly deal with that question. This item will be discussed in detail in the next chapter.

7.2.2 Conceptions of strategic level security

The strategic level security results were analysed from the strategic security survey. The strategic security survey (N=50) results showed that 24 % (n=12) were satisfied with the MOD's capability to respond to changing threats at least "well" (Mo=3; Md=3), and 32 % (n=16) considered that the MOD spends enough resources for monitoring threats and for surveillance. The results showed that 38 % (n=19) thought that the threats affect actions in the MOD (Mo=2; Md=3). The statistics on the results of the strategic security survey are presented in Figure 31.

Figure 31. Statistics of the strategic security survey

N=50	SCALE						
Item	Scale Sum	Mean	Standard Error	Standard Deviation	Mode	Median	Reliability
Respond to threats	150	3,01	0,13	0,93	3	3	0,95
React in crisis situation	100	3,44	0,14	0,98	4	4	0,86
National defence	150	3	0.14	1,02	3	3	0,94
Capability for changes	50	2,94	0,12	0,87	3	3	0,90
Strategic security	450	3,09	0.13	0,95	3	3	0,92

The results showed that 48 % (n=24) believed that the MOD possesses the readiness to react effectively in a crisis situation (Mo=2; Md=3), and 60 % (n=30) believed in its sustainability in a crisis situation (Mo=2; Md=2). The results showed that 36 % (n=18) believed that the MOD is capable of leading the national defence against a military threat in wartime conditions (Mo=2; Md=2). Nonetheless, 70 % (n=35) believed that the nature of threats in recent years have influenced the MOD, and 50 % (n=25) from departments responsible for guiding the defence establishment shared a belief in the need for an integrated total defence. However, the management personnel were the least likely to believe in this need for integration. There were no great differences between means, standard errors of the means and standard deviation, thus the data has significance.

7.2.3 Interviews

The interviews (N=21) were conducted within a calendar week with separate semi-structured safety and security questionnaires. The safety questionnaire is presented in Appendix 3 and the security questionnaire is presented in Appendix 4. The results revealed strong positive motivation regarding security from the personnel. The results also showed that *threats* against the MOD were the internal management system of the MOD, leaking information, a confidence gap between persons, lack of capability to follow and react to changes in the environment, lack of capability for rapid flexible changes, overlapping duties within the organisation, accidents, stress, urgency, illnesses that soon reflect on the small resources, mischief, vandalism, strategic and operational outsourcing, bomb attack, and letter bombs. The threats at the top of the list were seriously linked to the strategic, top leadership performance level, and moving more towards the end of the list items were more and more linked with the operational, executive level. However, they have a strongly overlapping nature. Additionally, accidents where linked to the bad physical shape of the MOD building and to the upcoming renovation of it. Another finding was that threats include both "hard" security and "soft" safety elements. A key issue with regards to threats was expressed in a response from person number three (interviewee 3= I 3) as follows:

> "… I assume that, anyway, the human being is the biggest risk in this house …" (I 3)

The results showed that the *assets* to respond to threats were being allocated to information, organisational image, personnel, environment and material. The interviewees emphasised that assets are tenaciously linked to each other even though information and image were emphasised. This finding was used in modelling security.

The results emphasised six key *meaning units*: security leadership, security culture, information security, operational security, personnel security and physical security. These were the key findings, but emergency planning and rescue security, as well, were raised. The descriptions of the last two findings were different, because emergency planning was linked to strategic level issues, while rescue security was linked to operational level of the performance of the every day life at the MOD. These findings were used in modelling security.

The meaning units were described with different terminology. *Security leadership* was illuminated with terms and expressions like value-based leadership, task and aim-oriented, legislation-oriented, commitment, security strategy and security policy, security organisation and responsibilities, occupational healthy and safety management, civil defence, comprehensive training program, security dimensioning, reporting system, comprehensive working order, exceptional conditions management, crisis management, corporate governance, user administration, development discussion, bonus-based pay system, and responsibility of an official for the above mentioned. The following response shows conceptions of the security leadership:

> "… the leadership of this organisation should be involved in security and readiness issues… as a constituent part of the entity…" (I 15)

Security culture was described with terms and expressions like accepted values, comprehensive crisis concept (i.e. not only war), guests, handling groups of co-operation and partnership (maintenance, cleaners, etc.), documentation handling, inconspicuous security principles, security image, reputation, serious and realistic attitude to security, anticipatory, behaviour, openness principles, administrative culture, security awareness, static and indifferent leadership, and concept of security, narrow/old vs. wide/comprehensive. The status of the security culture was repeatedly described as follows:

> "… we have a very open culture, and I can go to my neighbour's office and … I can go to his file cabinet to look for a paper …" (I 3)

Information security was described with terms and expressions like security of the information, usability of information, credibility of information, availability of information, information classification, loss and miss of classified information, life long log file surveillance, security arrangements, knowledge skills, competence area, information analysis, and intelligence and espionage detection. A reflection on information security is expressed in the next quotation:

> "… this kind of open preparedness should be aimed at … and still things ought not to be published too early … rumours, disinformation, wrong news, inconsiderate announcements, unprofessional communications, unskilled crisis communication are concrete threats …" (I 3)

Operational security was described with terms and expressions like meeting arrangements, reserve system, groups of co-operation and partnership, instructions, operational user administration, employee lifelong career, initiation processes, control and inspections, identification, quality systems, post lifelong career, crisis information, exceptional conditions instructions, self-monitoring, outsourcing, corporate governance, security agreements, and administrative authority co-operation. Persons' number 4 and 9 expressed examples from operational security:

> "Security improvement is everyone's duty… from my point of view the administrative line of the organisation is responsible for security … we have to be involved as early as possible in security issues …" (I 4)

> "I would probably start from here - that our actions are based on trust – department … actions are based on trust but how it is earned is a mental picture … " (I 9)

Personnel security was described with terms and expressions like rights and duties, pressure, stress – busy, schedule, lack of instructions, etc, security clarification, reserve system, employment – permanent/uncertain, people are the greatest risk, international interoperability, demographic structure, employee health care, debriefing system, occupational exhaustion, frustration, and legal certainty. Thus, reflecting on the above mentioned the situation is clarified by the following quotation:

> "As far as I understand the MOD lacks consistent information security directives or at least they are not given of staff." (I 1)

Physical security was described with terms and expressions like information network safety (physical, firewalls, virus programs, etc), compartment system of a facility, locking system of a facility, loss of information, misinformation, safety and security surveillance systems, physical protection, access control system, environment, high standard equipment and systems, spatial planning, intruder detection systems, integrated and automatic information collection systems, and air-conditioning. The following quotations describe the situation of physical security:

> "… in that sense it was previously an 'open doors culture', but later doors have been shut more and more …" (I 7)

> "… but as far as I am concerned it would be a good thing to lock your door always when you leave your room, because tables are full of papers, many times computers are on … because an outsider does not need to see those papers …" (I 6)

Emergency planning was described with terms and expressions like readiness planning and readiness training. *Rescue security* was described with terms and expressions like fire and safety rescue planning, fire and safety training, atomic, biological and chemical (ABC) defence system, and sudden health emergencies. The change process of security thinking can be seen in the following quote:

> "… thinking has been changed in line with the strategy for securing the functions vital to society. Moving from one readiness condition to another can be flexibly executed and the process contains no more stages … The gradual approach is more legislative than authoritative …" (I 10)

7.3 Modified security modelling

The findings from the empirical study also lead to the re-modelling of the strategic security model (SSM). Three findings were bracketed: meaning units of threats against the MOD, five assets to be secured, and six key meaning units of security. The meaning units are presented in detail in section 7.2.3. Modifying the SSM includes response to both "hard" and "soft" elements. The SSM approach involves moving away from the objectivist, rationalist approach towards more interpretive and empathic modes of analysis. To be aware of security from a broader viewpoint means: that both intellectual and material objects have shifted; looking at the perceptions of threats to individuals; the ways in which the objects are protected; and at the obtainable tools of securing them.

The crucial findings showed that those six key issues do not depend on the status of personnel; both strategic and operational levels should have the six key meaning units. They all are linked together, they are overlapping, they are competing with each other, and thus they create a cluster combination, where rescue issues from the operational level establish a concrete basis for the development of security and end with a high readiness of emergency planning capability to fulfil the rigorous demands of the worst case scenarios, i.e. war-time crisis. These extremes are tied together with strategic security clusters, not as a linear, but as a multidimensional coherent interrupted wave. Efficient rescue readiness is a concrete every-day issue, real time effort towards a secure organisation,

which has a similar philosophical basis as emergency planning and which is much more abstract in a learning organisation. However, emergency planning is an essential part of the public authority task of the MOD. Thus, strategic security should be integrated into the every day procedures of the MOD, and not viewed as a separate part of the performance of the organisation.

The strategic security role of the MOD is a vital element in the performance of the organisation. The MOD has two overlapping security sectors: the strategic level including international security issues and requirements, the national state legislation and the normative security level as a part of Finnish society, and the defence establishment security guidance perspective; and the operational level including co-operation within the Government and co-operation with partners such as the FDS and security issues inside the MOD organisation. Study findings, where a close group of people, organisations or things resembling each other and operating in the same area in interaction, compete and co-operate together and change together lead thinking to clusters because a cluster is understood as combining knowledge. Renewing used resources and qualitative development is possible in cluster thinking.

The agenda of *strategic security* is a wide-ranging understanding of security, and the overlapping connections between security levels are essential, such as those that cluster thinking has. Levels are divided into global, regional, national, organisational and individual levels. The organisational security level may also include international features, not only national, even though the model places it between the individual and the nation. Sectors are divided as Buzan (1991, p. 363) does into political, military, societal, economic and environmental sectors, which are bound together by the concept of security. The model demands an integrative perspective and full understanding of each of these levels and sectors can be gained, if they are related to the others. (Buzan, 1991, p. 363) This

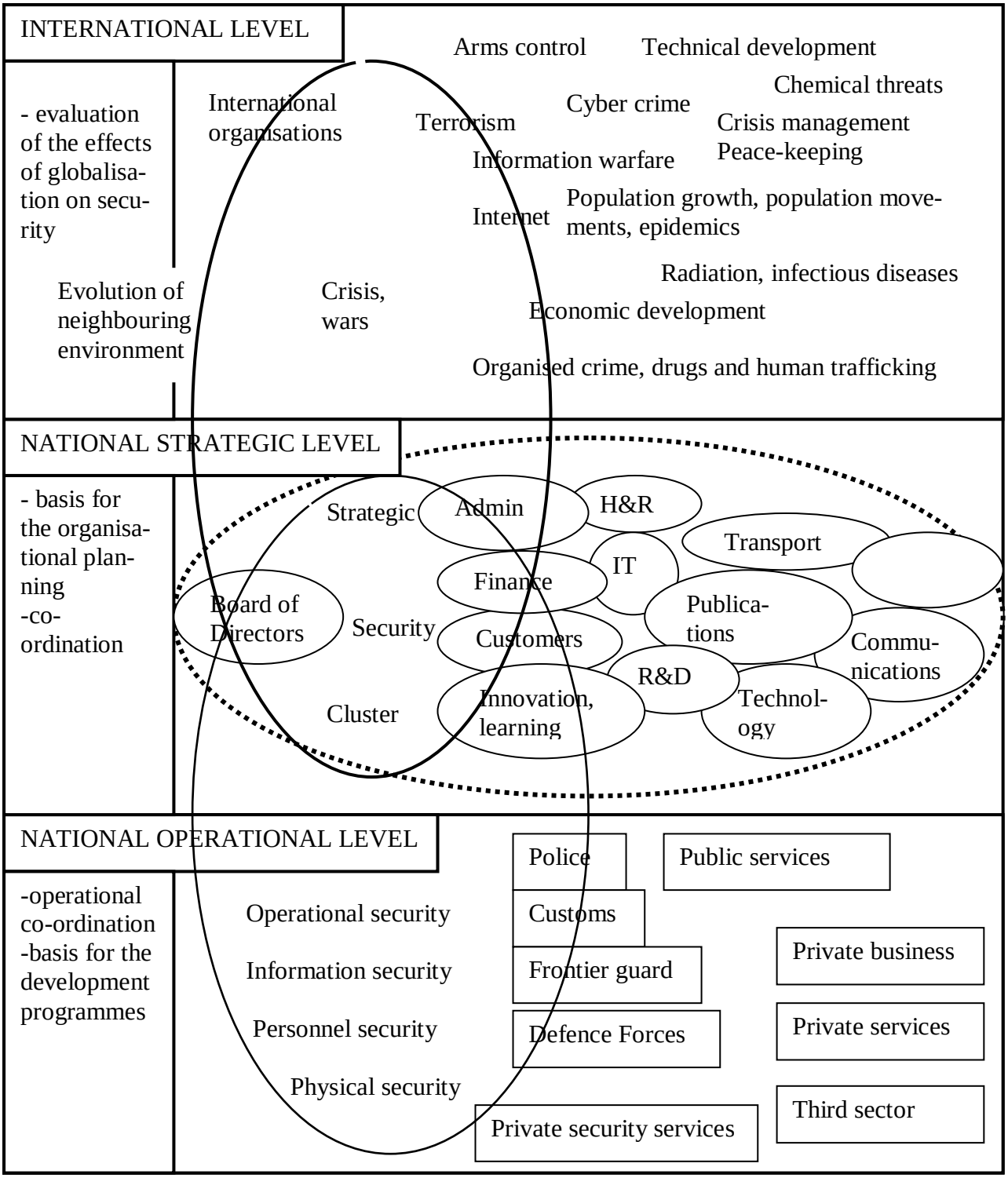
demand is also shared with strategic and operational levels within an organisation because the individual perspective is the basis for the ordering feature of both levels.

Thus, the cluster thinking point of view brings the finding to the need to re-model the SSM. Cluster thinking more accurately describes the nature of multidimensional expanded security in a learning organisation, and especially includes leveraging security at the MOD. Security as a highly applied mechanism requires pro-activity, initiative, creativity, and ingenuity. Thus, the general model includes a security leadership cluster; a security culture cluster; an information security cluster; a personnel security cluster; a physical security cluster and an operational security cluster. Additionally, the MOD public authority model includes an emergency planning cluster and a rescue cluster.

This model includes five assets to be secured: information, personnel, material, image and environment. These assets are not separate, but instead are all closely connected and linked to each other. However, as this is a model of organisational security the centre of assets is a kind of ideal goal, which differs from organisation to organisation. Thus, also the size, amount and content of different assets are flexible; such as is suitable for cluster thinking. According to the needs of an organisation clusters are also emphasised following the significance of assets to be secured, and resources to be used in accordance to the strategic planning in the organisation.

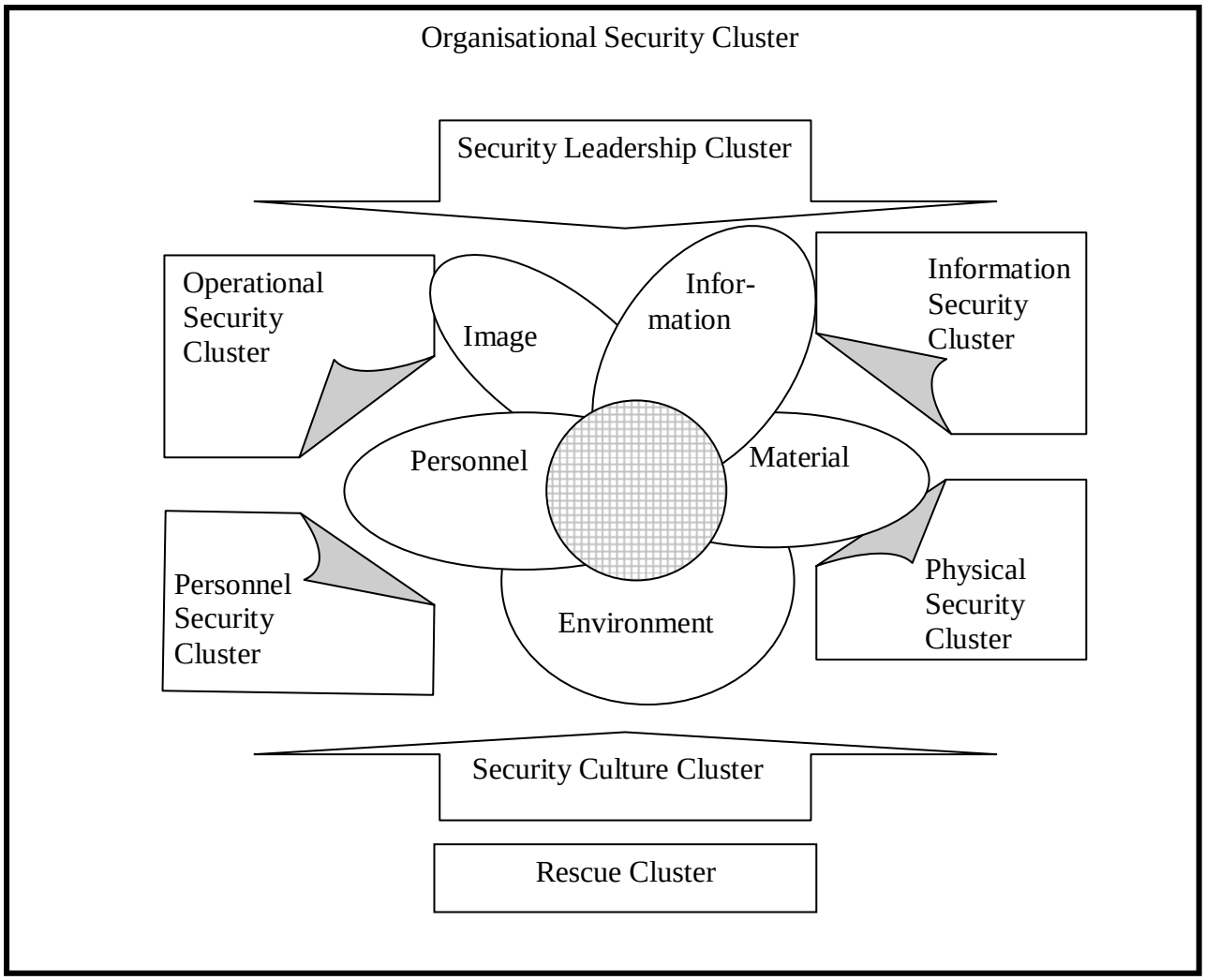
Cluster discursion emphasises long-term competitiveness and knowledge of the organisations they create in clusters. A typical feature for clusters is their ability to live in close connection with their environment within a given time frame. At state level administration this means pro-activity on the part of the organisation to ensure the needs of stakeholders, and thus MOD security may be considered to consist of clusters. The MOD's situation is modified according to the strategic security role in the organisation's strategic planning in Figure 32.

Figure 32. Strategic security role in the organisation's strategic planning



The changing environment challenges the existing knowledge paradigm, and the ability as well as willingness to share common knowledge is always a basic dimension of developing a cluster in security administration that emphasises the operational and structural flexibility of the clusters. The re-modelled Cluster Strategic Security Model (CSSM) is shown in Figure 33.

Figure 33. The CSSM as an Organisational Cluster Security Model



In the organisational security cluster model leadership refers to the organisation's comprehensive leadership of security matters. The *security leadership cluster* is a natural part of the organisation's strategic leadership, and it is adapted to the organisation's other functions, and puts a special em-

phasis on identifying threats and risks. Leadership works out programmed actions supporting the organisation's strategy, policies, principles and operations, and thus, the strategic security leadership (SSL) is integrated to the organisation's strategic decision-making process. Access control and user administration are the key elements of the strategic security leadership cluster functions.

Security culture cluster means a coalition of individual and organisational values, attitudes, perceptions, skills and behaviours, committed and up-dated norms and directives, both professional and personal. The security culture cluster includes goal-oriented operations, where a person's self-assessment supports the strategic security of the organisation. In the organisational security culture cluster communication is based on common trust, a common understanding of the meaning of security, and on the common belief for the effectiveness of predictive security.

The *operational security cluster* includes all actions that detect, evaluate, identify and counter threats and risks jeopardising the fulfilment of the task of the organisation. The operational security cluster reduces the likelihood of faults and accidents and their consequences. The emphasis is put on the actions following international principles of good governance, usability, credibility and availability of information is protected from risks and threats caused by malfunctions in electronic equipment, system disturbances or natural disasters and environmental accidents. Protection is also needed against different kinds of abnormalities, be they intentional or accidental, which result in the materialisation of risks or threats.

Information security cluster means the proper protection of knowledge, systems, services, hardware and electronic devices in normal and in emergency situations. The measures used are both functional and technical. The information security cluster includes those functions that guarantee that the information is reliable, confidential, continuous, complete, and accessible for authorised users

with the principles of meeting the security objectives of confidentiality, integrity and availability. The information security cluster and the security of information material is a concern of all personnel for its whole lifespan. It includes the secure handling of information and arrangements for the training of all personnel on the content of the instructions for handling information.

The aim of the *physical security cluster* is to secure high security-level buildings, and has security control as a part of the organisational core tasks. Declarations, permits and certificates concerning security are the responsibilities of the head of security, and these and other statutory certificates are documented in one common register. Physical security includes the control of visitors, controlling the movement of one's own staff, physical surveillance, technical surveillance and security equipment, building protection and special facilities.

The *emergency planning cluster* means the readiness planning and preliminary preparations for it, to ensure that duties can be carried out with minimal disruption under exceptional circumstances. Preparations for exceptional circumstances are a continuous part of the every-day security functions of an organisation. Preparations emphasise continuity of functions in severe, exceptional situations, such like military threats. The rescue cluster means proactive planning and preliminary preparations like drills, excercises and so on to ensure that normal duties can be carried out with minimal disruption under exceptional circumstances. Preparations for exceptional circumstances, such as fire and bomb threats, are a continuous part of the every-day security functions of an organisation. The rescue cluster includes saving, or taking something or someone away from a dangerous or harmful situation. Preparations emphasise continuity of normal situation functions. A detailed categorisation of the elements of clusters is presented in Figure 34.

Figure 34. Categorisation of the elements of clusters in the CSSM.

OPERATIONAL SECURITY	INFORMATION SECURITY
- meetings arrangements - reserve system - groups of co-operation and partnership - instructions - operational user administration - employee lifelong career - initiation processes - control and inspections, identification - quality systems - post lifelong career - crisis information, exceptional conditions instructions - self-monitoring - outsourcing - corporate governance - security agreements - administrative authority co-operation	- security of information - usability of information - credibility of information - availability of information - information classification - misclassification and loss of information - life long log file (ADP) surveillance - security arrangements - knowledge skills - competence area - information analysis - intelligence and espionage detection
PERSONNEL SECURITY	PHYSICAL SECURITY
- rights and duties - pressure - stress – busy schedule, lack of instructions, etc. - security clarification - reserve system - employment – permanent/uncertain - person is the greatest risk - international interoperability - demographic structure - employee health care - debriefing system - occupational exhaustion - frustration - legal certainty	- information network safety (physical, firewalls, virus programs, etc) - compartment system of a facility - locking system of a facility - loss of information and misinformation - safety and security surveillance systems - physical protection - access control system - environment - high standard equipment and systems - spatial planning - intruder detection systems - integrated, automatic information collection system - air-conditioning
SECURITY LEADERSHIP	SECURITY CULTURE
- value based leadership - task and aim oriented - legislation oriented - commitment - security strategy and security policy - security organisation and responsibilities - occupational healthy and safety management - civil defence - comprehensive training program - security dimensioning - reporting system - comprehensive working order - exceptional conditions management, crisis management - corporate governance - user administration - development discussion - bonus based pay system - responsibility of an official for the ie ???	- accepted values -comprehensive crisis concept (not only war) - guests - handling groups of co-operation and partnership (maintenance, cleaners, etc.) - documentation handling - inconspicuous security principles - security image, reputation - serious and realistic attitude to security - anticipatory behaviour - openness principles - administrative culture - security awareness - static and indifferent leadership - concept of security, narrow/old vs. wide/comprehensive
EMERGENCY PLANNING	RESCUE SECURITY
- readiness planning - readiness training	- fire and safety rescue planning - fire and safety training - ABC defence system - sudden health emergencies

As previously described this categorisation, and especially the content of the elements, are constructed in line with the phenomenografic approach from the responses of the personnel of the MOD in the VEIVI survey, the strategic security survey and interviews. The personnel security cluster means all measures reducing personnel-related risks, protecting key personnel from threats, and securing operations and actions so that the threats against one's own personnel are minimised.

The organisational security clusters create a continuum integrated into core functions of the organisation from normal, every-day functions and operations to the worst-case scenario of threat, a wartime situation. Successful strategic level implementation requires common processes and information structures and strong human influence between different clusters, organisations, and different information contents. Preparations construct a continuum of actions based on prior activities. In other words, the organisational security cluster includes step-by-step planning and preparations for a variety of emergency situations so that during normal situation preparations are planned and exercised and that all personnel know their tasks and actions in emergency situations, which are also exercised. Normal organisational security cluster thinking includes the continuum aspect, but emergency planning has also been assigned to public authorities as a special mission. Organisational security cluster thinking includes integrated natural security participation for all functions of an organisation. The strategic security cluster concept supports comprehensive strategic planning and execution by merging the actions of all parts of an organisation around a common understanding of its goals, by facilitating the assessment, and by upgrading the strategy.

The real power of the strategic security cluster occurs when it is transformed into a leadership system. The strategic security cluster system provides the information age organisation with efficient planning tools because it aligns and supports the key processes. Clarifying the security of the MOD, both on the strategic and operational levels, and updating security strategy identifies and aligns stra-

tegic security initiatives, links strategic objectives to long-term targets and annual budgets, aligns strategic and operational reviews, obtains feedback to learn about and improves the security of the MOD, as well as the internal, central government leadership system.

7.3.1 Leadership of strategic security

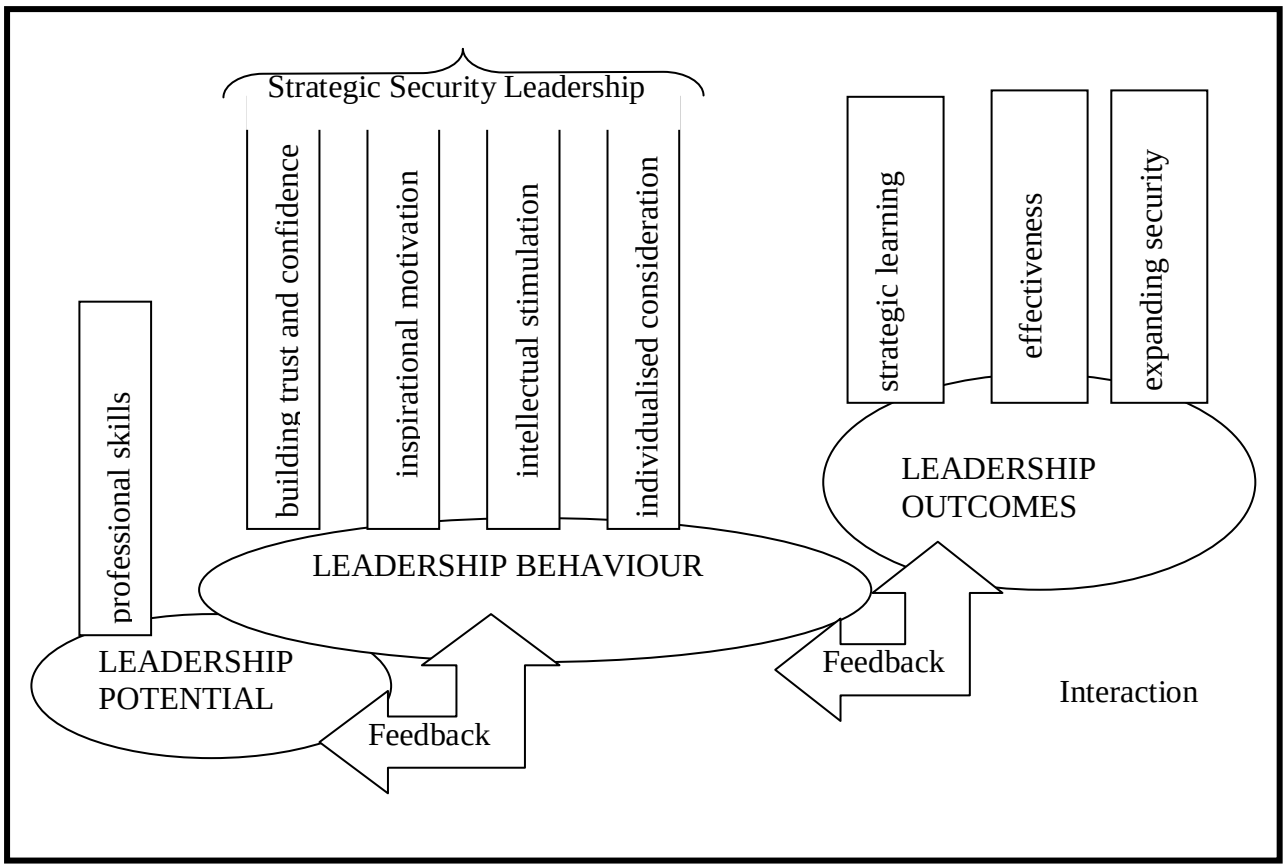
The three key approaches of this study, critical security, strategic planning and the learning organisation, emphasise the importance of leadership. Thus, *the strategic security leadership* (SSL) model is described by modifying the Deep Leadership Model (DLM) which consists of the constructivist framework of leadership. The DLM has been selected as the basis for this approach, because it was developed in the Finnish defence establishment. It is a new model but it has still been successful in practice, and it shares the humanistic basic premises of this study. It is understood as a model for the constructive change actor, it includes the idea of a vision and uses a strategy to achieve that vision According to it both the vision and the strategy are communicated to people, the people understand the goal and believe in the common goal. According to the DLM, working conditions stimulate and motivate people. As efficient DLM leadership creates change, it benefits the entire organisation, and it properly fits into the framework of this study. The other dimensions and factors of the SSM are more deeply discussed later in this report including those dimensions that can be evaluated in a reliable manner with external feedback.

The use of the term *leadership* instead of management describes the development process of an organisation. Thus, development of an organisation is defined as the learning process of the individuals, groups, leaders, organisation and partners. Additionally, strategic level planning combines strategic leadership and a comprehensive security approach with the learning organisation.

Leadership behaviour may be modelled with three dimensions that are deep leadership, controlling & correcting leadership, and passive leadership. Building trust and confidence, inspirational motivation, intellectual stimulation, and individualised consideration are four cornerstones of deep leadership. (Nissinen, 2001, pp. 219-225) *Professional skills* involve knowledge and practical skills needed by a security leader in his assignment and they are only one part of the potential of a leader. Professional skills of a security leader are efficiency-wise a relative concept because they are a basic requirement of excellent leadership, even though the contents of the concept change according to the level of strategic or operational security leadership. In this sense the term professional skills involves the expanded perspective of practical skills, information and constructive leadership behaviour. In his own development process the SSL leader must aware of the requirements presented in the feedback on his values and attitudes.

At the operational level the professional skills of security leadership have the greatest effect on practical activities, which, to be successful, demand sufficient practical security skills and physical performance potential. While moving more and more towards the strategic level of security leadership, the demand for professional skills change, because the security leader can no longer control all details and, therefore, the ability to use the potential of and the development of his or her subordinates' individual skills is emphasised. At the strategic level of an organisation security leadership is based more and more on the conceptual thinking ability that emphasises strategic thinking, understanding and control of processes and entities with visioning capabilities. In the transfer of organisational values, visions and security strategy of the organisation and the efficiency to utilise the resources and the coaching of subordinates is emphasised. The model of SSL involves three main dimensions and eight factors as shown in Figure 35.

Figure 35. The Strategic Security Leadership Model (SSLM), (modified Nissinen, 2001, p. 219)



Of the main features of SSL, *building trust and confidence* are the first and most important factors of security. It can even be stated that trust is the core value of security and the SSM. Additionally, building trust and confidence is a behavioural model for a superior, which his subordinates and partners can admire and respect. The leader putting the needs of his subordinates above his own needs and also when risks are considered mutual builds trust. The ethical and moral basis strongly rises from organisational values, which attribute openness, honesty, fairness and impartiality. Thus, in SSL the leader rarely uses his legitimate power and never does so to seek his own advantage.

By using *inspirational motivation* the security leader gets his subordinates and customers to find new meaning, features and challenges in their work. Shared goals, experiences and feedback in-

crease the integrity of the security and of the organisation. Subordinates and customers are included in envisioning goals and they have confidence in the future, which strengthens their commitment and ability to function. Clear security rules and functional directives are set for the organisation; they are followed on a voluntary basis. The process of security goal setting is challenging and integrates the strategic and operational goal setting of the organisation. By his own example the strategic security leader expands the security awareness and behaviour of his subordinates, customers and the organisation and encourages the development of new, predictive ways for the best practices and for the efficient performance of the organisation.

Intellectual stimulation of SSL encourages creativity and supports the innovation of subordinates and customers. This is showed by questioning basic assumptions and by seeking new solutions to problems and new approaches to work. In this approach mistakes in commonly agreed limits are seen as a natural part of the activities of a developing organisation and this approach can learn from the mistakes. SSL accepts the contributions of subordinate and customers ideas and their ideas are then included in the problem-solving processes. Thus, subordinates and customers are encouraged to try out new solutions and the approach also accepts disagreement. SSL emphasises the use of a wide-range feedback system, including giving and receiving positive and negative feedback.

Individualised consideration means a positive view of people and the genuine interest of the strategic security leader in his subordinates and customers as human beings. The leader is a coach, who, through individual interaction, recognises the individual's needs, development growth and also accepts individual differences. The SSL leader spends time with subordinates and customers, and interaction occurs on an individual basis. This individualism is implemented when the leader knows individuals personally, recalls earlier conversations, treats people individually and is known as a

good listener through interpretation, appreciation, evaluation and response (Raiola, 1995, pp. 13-15). The SSL leader has a supporting attitude towards subordinates and customers.

The outcome of SSL is the strategic security of an organisation that is modelled in this study. The organisational SSL outcomes involve the productivity, effectiveness and efficiency of the entire organisation in which the strategic leader has influenced. This approach helps to achieve the set strategic goals and to expand security. Smooth and constructive co-operation, vigour and exceptional quality are the characteristics of an organisation following SSL principles. SSL integrated into the whole organisational leadership supports the qualitative approach and the individual's attitude towards self-development. With this shared strategic approach the efficiency of the organisation is productive.

Strategic learning means the top leader's learning, which greatly reflects on the satisfaction of the organisation, leaders and customers. This is so because the leader is able to flexibly change according to the situation, and thus enables a foundation for success where subordinates feel that they have created the matters that breed satisfaction. Strategic learning is related to the efficiency, productivity, security and success of the organisation, as SSL is. Expanding security performance includes willingness on the part of subordinates and customers to commit to the work society, to the leader and to contribute to the strategic and operational goals of the organisation. Hence, people voluntarily increase their work contribution.

However, the next step in the strategic security cluster approach is the adaptation of the strategic planning process in four areas: impact, customers, including citizens, processes and personnel with innovation. Thus, the strategic security cluster approach starts from the organisation's vision and strategies, where critical success factors are defined. Hence, the strategic security cluster is a strate-

gic leadership concept that helps managers at all levels monitor results integrated with security in key areas. In the MOD it should be integrated into the balanced scorecard (BSC) implementation. Thus, in the next section this implementation is presented.

7.3.2 Planning the strategic security

In this model strategic core areas are described according to the BSC model with cards. In the MOD this could include four cards: efficiency, processes and structures, resource leadership, renewal and functionality. The BSC framework includes both internal and external organisational processes. Internally, the main and supporting processes are activated to improve capability and to achieve efficiency and quality goals. Externally, the goals are reached by reducing borderlines through co-operation and by benefiting from the knowledge and skills of different actors.

Because the BSC has been taken into use in the MOD as a strategic leadership and development system it has been used for modification, and in a general way has been presented to describe security, to support decision-making, and to do strategic leadership and management by results. This approach involves emphasising functions and performance according to strategic guidelines by operationalising strategy; changing organisation support according to the strategy, making strategy a part of all staff work, implementing strategy as a continuous process and making the Permanent Secretary and the board of directors lead the change.

Modelling security based on the BSC management by results tries to respond to the question: How do security issues affect the strategic directive and development processes of the defence establishment? Thus, the management by results card could include critical core processes, such as, the

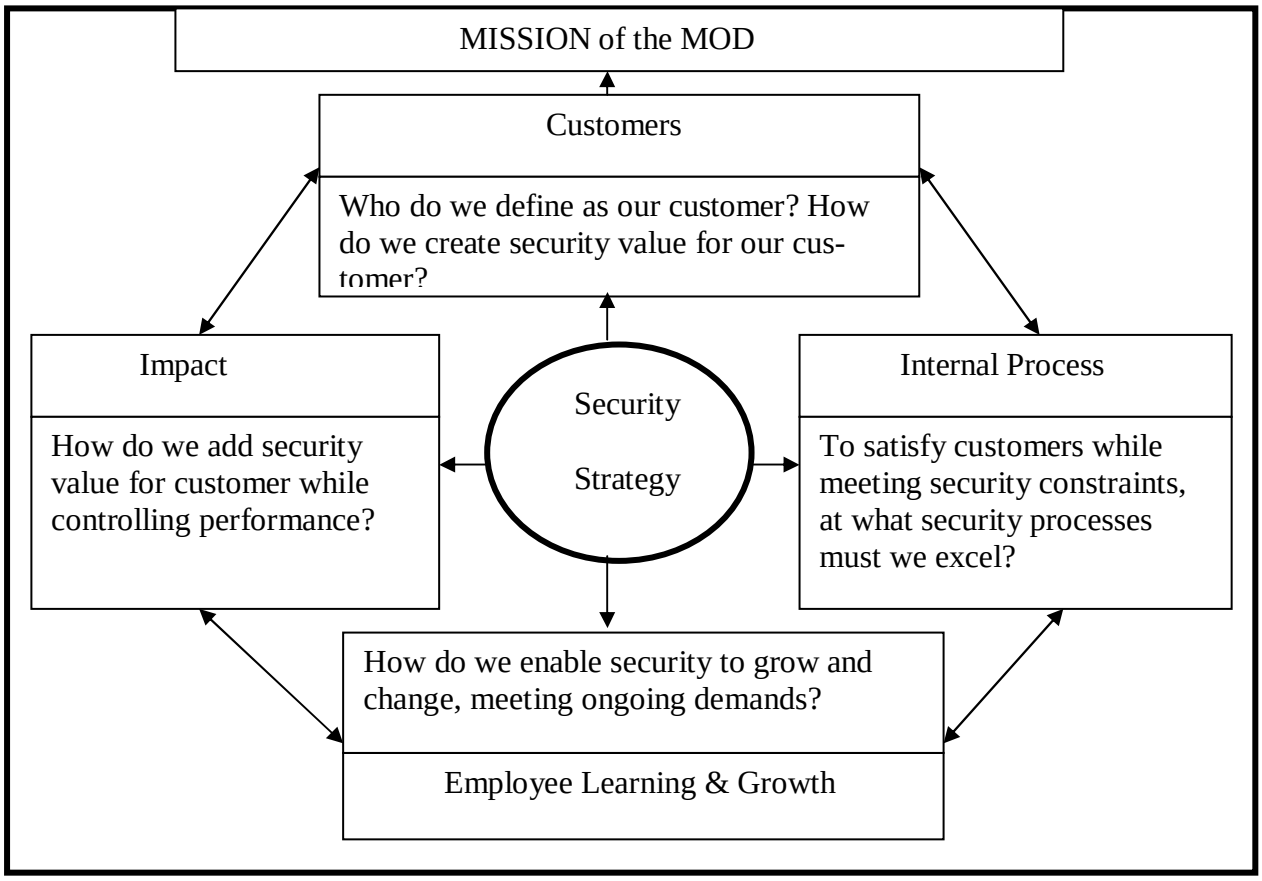
management by results is economical and efficient so that functions and processes promote and support the MOD's strategy and goals. With management by result the performance of departments and individual units would become more efficient and productive. The criteria include the growth of efficiency, the growth of impact and the qualitative functionality of the management by results according to the feedback received. The evaluation criteria include both a period of several years and a yearly evaluation of established development projects.

The BSC cards describe goal areas or separate goals with activities and projects focused on the goals and, additionally, on the realisation, which identified quantitative and qualitative gauges would achieve. The cards may be linked in and between organisations. Department or project areas may divide the cards of the MOD. Depending on the level and set approach the perspective may be the internal process, customer, impact, or employee learning and growth.

The resources and processes perspective may set goals, for example, for a holistic virus detection and protection program, which is measured by the amount of interruptions of service or the protection coverage of workstations. Another goal to set may be one that requires online security organisational capability, which may be gauged, for example, by the human resources of the security organisation and by security planning as well as the number of personnel trained for crisis events. Measuring is operationalised by numeric description.

By combining the cards we get to the unit and individual level, for example, with annual appraisal procedure. This procedure clarifies practical actions and personal responsibilities. Leaders and superiors play the key roles when making the entity and the concrete goals of realisation. Strategic security modified to the BSC is shown in Figure 36.

Figure 36. Strategic security modified to the BSC (modified from Niven, 2003, p. 1)



Security has an indirect effect on the impact card. Direct development and evaluation projects may be linked to the customers' card from the point of view of qualitative perspectives. Gauges used could be job satisfaction or customer satisfaction, questions which especially include remarks about differences. The processes and structures card contains the main security evaluation factors, that is to say productivity and the economy of functions. In this content questions focus on economical effects caused by security threats, as well as on defining development projects and their connections to different security key elements. Measuring may be done by security surveys, inquiries or by qualitative evaluation that defines acceptable deviations. The resources card is connected to security via human and economical resources; the perspective comes from the vision through the accepted

strategy. The human resources card's main aspect is the development of security knowledge and the competence of the personnel. This gives the possibility to define the goal of the vision and to compare that to the realisation. Other things connected to this card are, for example, security leadership and security control with quantitative and qualitative gauges.

7.4 Impact of the MOD

This security updating launched the revision for a clear, structured security system, organisation, tasks and methods in the MOD. The board of directors and Permanent Secretary are the key players that can alter the new security paradigm of the ministry. The opportunity for a successful process of developing an efficient security system is there, because personnel have expressed strong motivation, a positive attitude and willingness for the improvement of the security of the ministry. The impact of the results and the process is discussed in the next chapter.

8 DELIBERATIONS OF THE RESULTS

The general aim of the research was to the study the security phenomenon in the framework of a learning organisation. The critical security approach was the basis of the intervention with the help of the strategic planning perspective. The main focus of this research was on coming up with a strategic security model and leadership for strategic security. Examining the conceptions MOD personnel was a sub-focus and at the same time a means for developing the constructed models. Furthermore, the aim was to study what effect this process has both on models and on the security of the MOD. The key results of the different parts of the inquiry are equal without major discrepancies.

This empirical inquiry in the MOD was an examination of an organisation made with a view to the status of security strengths and weaknesses that offer a concrete opportunity for the personnel to participate in developing security by sharing their conceptions on security. With the data collection and analysis process the security inquiry overlapped the statutory and normative regulations of the Government (VAHTI, 1/1999). Scheduling surveys into the MOD reorganisation procedures gave an integrated opportunity to evaluate the security of the MOD from the new critical security perspective. The results with proposals to proceed captured the attention of both management and personnel. This security analysis process offered significant opportunities for learning in the MOD.

8.1 Modelling security in a learning organisation

The research results on the concept of security showed that the nature of security is in turbulence, and that this turbulence leads to the path of the critical security approach. That is an important per-

ception, especially because the defence establishment is typically linked to the old-fashioned and narrow security concept. The theoretical philosophy that is particularly behind security studies is a new security paradigm, even though the term critical security is not always used.

The results of the literature review illustrated the importance of defining and modelling the central concepts. In the research process it became obvious that the meaning of this phenomenon may be quite different to the different participants, or that it either plays no role at all or only a little role in an individual's life, or that it takes a very different form. The topic of constructivist learning with phenomenography as the main methodology of the study is, after all, the participants' security perception in a learning organisation, i.e. issues that are relevant in their lives. But these findings constitute neither flaw nor difficulty in the research. It is plain that for neither such participants' security nor a learning organisation is seen as the most meaningful subject to live with. The study intervention constituted the most meaningful aspect of security or a learning organisation for the participants. Consequently, a strenuous endeavour to extract conceptions of security or of a learning organisation would have been ill founded.

From the point of view of critical security the strategic security model (SSM) was developed covering both strategic and operational levels. Nevertheless, this model is more or less under criticism, because it is quite theoretical. However, the heuristic hypothesis is that the model may also be transferred to other state organisations and maybe to the private sector, also. In the SSM changing the focus of security to the individual paradoxically allows an appointment with the broadest global threats described by Krause and Williams (2003, pp. 43-46). Strategic planning is linked in the model with the balanced scorecard (BSC) because the MOD has adopted its use.

Strategic security leadership (SSL) is a natural part of an organisation's leadership, and it carries out programmed actions supporting the organisation's strategy, policies, principles and operations. Traditionally, security leadership has been separated from operational leadership, but Burns-Howell, Cordier and Eriksson (2003, pp. 13-15 and pp. 67-68) and Wyllie. (2000, pp. 6-11) has also been interpreted this study's perspective on the integration of leadership. Building trust and confidence, inspirational motivation, intellectual stimulation, and individualised consideration are four cornerstones of the deep leadership model. (Nissinen, 2001, pp. 219-225) SSL is modified from the deep leadership model (DLM) in spite of the criticism presented in chapter 2. One critical factor is that the basic model of the DLM is based on the quantitative approach, which affects the concepts of learning, reality, human beings and information. They are narrower than the ones used in this study with the qualitative approach. To make a difference between DLM and SSL epistemology the ontological and methodological premises are clearly described.

The DLM may also be criticised from the controlling and corrective security leadership perspective, which leads to ostensible efficiency, where subordinates become passive, extra effort is reduced and initiative disappears. (Nissinen, 2001, pp. 219-225) This type of leadership may be seen to belonging to a repairing organisation (Levä, 2003, pp. 146-147). SSL is the opposite of passive leadership, where the leader does not like to take a stand on anything, he is in no contact with people, he avoids responsibility, and thus, decision-making is difficult and late. (Nissinen, 2001, p. 223.) This kind of leadership may be categorised as typical for a reactive organisation (Levä, 2003, pp. 146-147). The leader receiving feedback must become aware of the demands presented by the feedback on the reviewing of his values and attitudes (Malmivuori, 2001, pp. 139-149).

In the SSM emancipation opens up the opportunity of political programs, which relativists see as being against them; and static relativists pained by what is an essentially active model. One option

for this behaviour can be that traditional relativist theories emphasise power and order as the bases for security. Another can be that those theories are based on static concepts.

8.2 Conceptions of security of the personnel of the MOD

Launching the interview week's program was presented in chapter 6. It addressed the functional problem of the organisation of the MOD, which may also be interpreted as a traditional inattentiveness attitude to security reflecting the status of the security culture in the MOD. What this phenomenon revealed was a crucial factor in the way to achieve efficiency in MOD security. On the other hand, this finding itself already was valuable for this study, and gave the reason to finish the study. Particularly from this finding the crucial necessity to develop and improve the security of the MOD emerged, if the MOD intends to follow international demands and national regulations. (588/2004) The top-level and middle-level leaders are the most challenging area to engage in with a proper security in the MOD. Only once they take part in security activities efficiently, will the productivity of the MOD improve.

8.2.1 Positive motivation for reasonable security

The results showed that the meaning of security as well as trust in the efficiency of predictive measures constitute the basis of a good security culture. The results inferred that personnel seem to understand the philosophical core of the expansive strategic security where security is everyone's business. The results showed that there is a positive attitude towards changing habits when it is reasonably required for the sake of security. The results on the security culture supported the continu-

ous improvement of security systems, strategic planning, and the learning organisation. This is essential from the learning perspective, because the motivation of personnel towards improvement is one of the corner stones of building a successful security system. The VEIVI survey's results (person 1, V 1) and the interview results interpreted strong positive motivation (V I and I 10):

> "Definitely. When some 'procedure' is operationally implemented then absolutely it will be followed. " (V 1)

> "… we have to remember that it is not the building that does something for security, but the personnel. It is the standard of security of the personnel that counts…" (I 10)

8.2.2 The silent killers phenomenon

Results found the possibility for a phenomenon called *silent killers* (Beer & Eisenstat, 2000, pp. 29-40) in the organisation of the MOD, i.e. the specific organisational dynamics that block the organisation from learning about the organisation's internal functioning. This finding is not unusual (Beer, 2003). Consistent perceptions of barriers for organisational effectiveness by top team leaders and key lower-level managers are common. Lower level leaders have not communicated these barriers to top management, nor have top management taken action to confront them. The barriers were identified as follows: unclear strategy and conflicting priorities; an ineffective top team; a top-down or laissez-faire style of the general management; poor vertical communication; poor co-ordination across functions and insufficient leadership skills and development of down the line leaders. (Beer, 2003, p. 315) The results of this study and others (Krogars, 2000; 2001; Väänänen, 2003) found identical features in the MOD, and, thus, it means the existence of a silent killer layer of top and lower level management resisting the change and development of the organisation. Especially

strongly has this phenomenon become visible in the interaction processes of the MOD's organisational security elements. This finding also reflects on the security expert paradox explained later in this section. Because of its long-term findings this phenomenon indicates the status of the cultural development of the MOD. This means that from the credibility and transformability point of view of the SSM the MOD seems to somewhat, but not sufficiently meet the demands of efficient strategic planning procedures and goals of the effective learning organisation process.

The results produced another interpretation linked to the silent killers phenomenon that prevented employees in the MOD from speaking up: *psychological safety*; and a concern about the *utility of honest feedback*. (Edmondson, 1999, pp. 350-383.) Employees are afraid that telling the truth will negatively affect their acceptance and their future careers, and they protect themselves from the anxiety associated with providing feedback up the chain. The employees' experiences tell that speaking up does not lead to change. (Beer, 2003, p. 319) This aspect was visible both in the results of the interviews and in the interaction with the organisational security elements. Additionally, the response activity reveals this same problematic situation, as in the strategic security survey, for example, only 88 % (n=44) of the respondents were willing to state their position in the organisation, and only 84 % (n=42) mentioned his or her current department or unit. It is also remarkable that 14 % (n=8) refused to give their service time in the MOD or their educational background.

8.2.3 The conservative restoration phenomenon

The results of the interviews, the results of the VEIVI survey and the results of the strategic security survey showed the similarity concerning the leaders' inattention to security issues. Shor (1996) gave the title the "*conservative restoration*" to a phenomenon where power holders defend themselves

against social-change-oriented research and functions. This may be interpreted in many ways, because: the organisation of the MOD has traditionally been inattentive to security; the leaders have not seen it necessary; the MOD has not considered international security issues sufficiently enough; the leaders have not efficiently enough followed the change in the environment. If the leaders have noticed the changing environment; and the need to put more effort into the security; but have not done so, then they are not willing to change their style and the culture of the MOD. However, in an organisation like the MOD, this should not be the case, as the content of the issues of work are mainly, or at least should be, at the strategic level. If this is the case in the MOD it leads to the questions: "is this normal procedure in the defence establishment?", or "is this normal procedure in the state establishment?" Relevance to this perspective comes from the Ministry for Foreign Affairs (MFA) (Huittinen, 2005) report on security resources and leadership in the Tsunami –case. This finding is illuminated with the following quotation from the VEIVI survey (V 1) response:

> "For many years one emergency exit was locked, so that it would not have been possible to use it in a possible emergency situation if that would have happened; neither could the door be broken. I commented many times about the matter without any result." (V 1)

The results showed that the security of the MOD exend to both strategic and operational levels. Four aspects described in the beginning of chapter 7 clarify this finding. The new ideas from Cohen (2002, pp. 13-20) and Kaldor, et al. (2004) support these interpretations, even though they use the term human security or humanistic security. When comparing this finding to the current situation of the security in the defence establishment it revealed the lack of strategic level security. Finnish national legislation (588/2004) assigns the strategic level responsibility of security in the defence establishment to the MOD. Results showed that while the departments of the MOD are responsible for guiding an integrated defence 50 % (n=25) of the personnel from these departments share a be-

lief in the need for an integrated total defence; and management personnel were least likely to believe in the need for integration. These findings are valuable because the results showed that the Finnish defence establishment as well as the MOD lacks organised strategic level security that meets with international requirements and national regulations.

The MOD security process and the status of security in the defence establishment do not support the development process for strategic security from the viewpoint of continuous improvement, because the MOD lacks the principle of openness as indicated in the paradigms of strategic planning and critical security. The lack of security knowledge, the indistinctness of the principles of security and the vagueness of the security leadership are dashing the personnel's trust in security. Therefore, this survey challenged the inertia over security in the MOD and the results of this survey revealed a great deal of complacency. The functional tradition of the MOD supports resistance against change and development. The security process of the MOD weakly supports the continuous improvement of a comprehensive strategic security because too many in the MOD do not understand that the lack of knowledge and lack of clarity of its security principles act contrary to the requirements of a good safety and security system.

The results showed that the MOD personnel do believe that integration of national defence co-operation is as easy as it was before the reorganisation of the MOD, and thus the reorganisation has not added any value to integration. When analysing the organisation of the MOD it was remarkable to find that the Decree on the Ministry of Defence assigns security to the Administration Unit, but does not assign strategic security responsibilities, or security guidance responsibilities of the defence establishment to any department or unit. Additionally, in comparison with international organisations, such as the EU and NATO, the superior security authority of the defence establish-

ment, Designated Security Authority (DSA), is at the Finnish Defence Staff (FDS), and not at the ministry. The following quotations clarify this aspect:

> "This means the change of the operational culture and functioning, which requires long-term, goal-oriented development. The relationship between the MOD and the FDS raises the greatest problem in the guidance of the defence establishment, because of the shadow of the `invisible wall´, which makes co-operation and interaction difficult. The problems of guidance include the lack of knowledge, the superiors' lack of having the competence of their subordinates, the lack of trust, disproportioning of the resources, shortage of the personnel and lack of expertise." (S 1)

> "Straightforward, everyday, normal dealings with the subordinate administration (the FDS) are difficult. Some kind of amazing lock or something else exists between the MOD and the FDS." (S 1)

> "Strong FDS, overriding the MOD" (S 1)

> "The role of the MOD and the relationship with the Finnish Defence Forces (FDF) and, especially, with the Chief of Defence of the FDF is not clear. The MOD has no authority." (S 1)

8.2.4 The optimistic paradox phenomenon

The results implied that the personnel believed that things are in good order; but as a matter of fact, things are not in such excellent shape when compared to both international and national norms and

standards found in the literature review. This phenomenon is called an *optimistic paradox*. The optimistic paradox was found in the following areas: the level of contradictions between the beliefs and norms of security; the status of instructions; the amount of security education and training needed; the level of following security instructions; and the status of systematic data collection on information about abnormalities and the neglecting of security needs. All of these challenge the MOD. The optimistic paradox launched a need for evaluation, checking instructions and arranging education for personnel to avoid accidental problems. The next quotations from both the VEIVI survey and the interview results clarify the whole picture of the optimistic paradox entity:

> "Probably things are updated, but I because I have not read them for a long time I do not know." (V 1)

> "I assume that this is the situation but I do not have the slightest idea about the matter, so I can not guess." (V 1)

> "I have read the directives and other sound-bites but just now I do not recall all directives that I have read. However, I believe that I follow all of the principles that are meant here." (V 1)

> "… let us say it this way, that I have a feeling that people are apparently aware of security issues. People imagine that things are in good shape… but as far I a am concerned this is not at all the case." (I 20)

The optimistic paradox also interprets the status of the MOD from the learning organisation point of view. Results indicate that currently the MOD does not meet the standards of a learning organisa-

tion (Alasoini, 1999; Sarala & Sarala, 2001), but that it needs additional efforts like education and new instructions on security to reach the capabilities needed in a learning organisation.

Two critical aspects emerged from the VEIVI survey results: a *lax attitude to safety and security instructions,* and lack of confidence in the credibility of the functions of the information security system. Up-dating instructions and education seemed to arise as some of the most important aspects in the development of the security system. A lack of robust information security instructions and education is a critical aspect due to the fact that in a learning organisation, such as the MOD, safe and secure handling processes of all kinds of information are emphasised, and information security is one of the main areas of security, both from international and national perspectives.

An illustrative example of the lack of credibility of the functions of information security is a phenomenon called the *technical information security paradox*. This means when people expect that a technical information system will help in administrative issues when it is operational, but simultaneously the information technical experts then announce severe concern about the technical status of system. Additionally, technical experts express the low level of skills of the uses, and the low level of resources. (Puolustusministeriö, 2003) At the same time the VEIVI survey results and the interview results expressed a crucial lack of trust in the information security personnel, and in the level of secure functioning of the information system. (Puolustusministeriö, 2003) The phenomenon is clarified with the following quotations:

> "I do not know how well confidentiality is maintained at the level of the net system security administrator." (V 1)

> "There have been some cases when another person's password has been used with the results of serious damage, albeit by chance." (V 1)

> "… actually I do not have the resources and enough authority to see to the technical issues. The field of information technology is so wide that the existing manpower is hardly sufficient for successful situation handling …" (I 9)

8.2.5 The security expert paradox phenomenon

The results showed a phenomenon called the *security expert paradox* meaning optimism for a better security situation in the future. This may be interpreted to be a sign of the compliance of top leadership at the MOD by which they pay attention to the security status at hand. It may also be interpreted to mean the manifestation of international influence and requirements and an indication for administration regulations for strategic level performance in the field of security. However, in this situation the result itself already brought about a reason for further research: to investigate whether this phenomenon is a general feature in the organisational culture of the MOD, in the organisational culture of the state administration, or whether this is a typical feature in the leadership procedure of the MOD or the state administration. However, the security expert paradox revealed the status of the attitude of the management towards security issues, the status of security in the MOD, the position of strategic and operational security leadership, the standing of the security organisation and administration, the significance of security responsibilities, and the level of capability for information security in the MOD. On the other hand, Flink (2004) came to the opposite conclusion when she came to the conclusion that the status of the security culture in the Finnish Defence Forces (FDF) was good. The following quotations illuminate both optimistic and security paradoxes:

> "A new chief of security has been nominated and from him we will get more information on how everyone should act in different situations." (S 1)

> “The handling of security is going to be in better shape when we get an expert in our workplace.” (V 1)

8.2.6 The human firewall phenomenon

The results showed a phenomenon called the lack of a *human firewall* in the form of negative and suspicious conceptions of the personnel towards rapid reaction to threats, changes, international and internal interoperability and the capability of guiding the defence establishment. This is demanding for the organisation and the top management. Thus, either the organisation of the MOD lacks the resources or capabilities for responding to this challenge, or the need for these has not been notified, or the process of reorganisation has not been successful, or the attitude of the personnel is not favourable to this kind of mission for the MOD, or the personnel prefer to stay in old, traditional and stable tasks, or for some other reason the personnel strongly share this conception. A total of 50 % (n=25) had a clear view of the organisation’s capability to more actively follow the changes in the security environment and to be prepared to rapidly respond to external threats. On the other hand, the results showed that there were opinions that supported the idea of the significant effect of the changes in the security environment, as follows:

> “Changes in new security threats have a very great impact on the performance and functionality of the MOD, as well as on its public authority role. As long as a peaceful coexistence continues, there will be no functional changes, but as soon as there is a `crush´ around us it will affect, for example, special statutory activities et cetera, et cetera.” (S 1)

The human firewall at the strategic level was found to have the effects of changing the threat category to “Lack of a human firewall” because the interpretation of the operation of the MOD is strongly traditional, stable, passive, and shows emphasis on the reactive policy, and is slow to change policy. This resistance emphasises reaction and, thus, the MOD is challenged with the need for more resources, research and information. On the other hand, the interpretation may be that there is a “Human firewall” that does not allow any new information to penetrate. However, the results showed some wider and more analytical conceptions about the effects of the changing security environment:

> “Traditional security thinking concentrating around the national defence is only one (even though the central) part of the security arena in the changing environment. In the future horizontal administrative co-operation will achieve a more crucial status. Most likely, the need for research activities will increase.” (S 1)

> “There is an increased need for the capability to react and the ability to change and for more efficient follow-up on the situation picture.” (S 1)

> “Requirements for ever wider information expertise have increased and the MOD has to gradually tighten its security control.” (S 1)

> “How do you guide crisis and war time public authority tasks when you do not have gauges that are illustrative enough even in peace time? How are the responsibilities and resources shared with the responsible ministries designated for co-ordinating total national defence?” (S 1)

8.2.7 The Impivaara isolation paradox phenomenon

The results showed that the conceptions about new threats were critical, and only a few observations concerning new changing threats were found. This state-of-denial phenomenon was called the "*Impivaara isolation paradox"*. Impivaara is a far away and small place in Eastern Finland and it is thought to be isolated part of Finland. Additionally, new threats were not felt to have an influence on one's own duties, which also indicates to Impivaara isolation paradox. This phenomenon may indicate a lack of willingness to change with the changing environment, or learn to learn from new things, or it may also indicate the culture of the MOD. From the Finnish national perspective this finding is clarified with the next quotations:

> "No effect at all. If it has any implications it is visible in the Defence Policy Department, while the Administration Policy Department and the Resource Policy Department continue overlapping functions with the FDS binding resources which ought to be in the use of the Defence Policy Department for defence policy preparations." (S 1)

> "The question is very general, because the effect of the changing security environment probably occurs on a case-by-case basis depending on the seriousness of the threat. The changes in threats in the recent past have not had a remarkable effect on the functioning of the MOD." (S 1)

> "The change of security threats should have no effect on the functioning of the MOD. The MOD has to be operational independent from external circumstances and it is the authority that is the first to inform the top leadership of the republic on changing circumstances by describing the situation. The internal threats of the MOD are the most

dangerous as `experts´ without enough competence and expertise destroy structures that are found good and functional.” (S 1)

8.3 Re-modelling security

The results raised two issues. First, the need to be careful with language because even though often-used terms seem to be familiar they may have totally different meanings for different people. Second, the pictures of the participants in the interview analyses bear a variety of relationships in this stage. The bracketed meaning units allowed flexibility in the presentation of the findings. The capability of learning to learn and the skills of interaction are the key elements in future organisations and in work and, thus, also in the SSM.

The results emphasised two levels in the organisation of the MOD, strategic and operational, meaning that the strategic deals with the top leadership level on international affairs, the Finnish statutory level, the strategic level of security issues in the Government, and the guidance of the defence establishment. The operational, executive level of the organisation of the MOD handles affairs inside the MOD and operational affairs inside the Government and the partnership security affairs of the MOD. The secured assets are information, personnel, image and material. Security is a part of the strategic level directive relationship between the MOD and its subordinate administration. The performance of the subordinate and the higher administration has an overall approach with several different perspectives, for example, efficiency, quality, physical and mental resources. Thus, security strengthens good governance. This finding may be transformed to the SSM so that it also includes both strategic and operational levels.

The results showed the following assets of an organisation: information, image, personnel, environment and material need to be secured. They did not support the division of the concept of security into internal and foreign security but, on the contrary, meant that this division is artificial in the sense that the division has lost its meaning. This thus supports combining the execution of securing efforts. New thinking in Finnish society and in the defence establishment is required because, for example, in 2004 the Government gave separate internal and foreign policy reports. The move to combine these is even more radical when one considers that the Ministry of the Interior Affairs chaired the Internal Security Programme (ISP) report (Government report, 44/2004) in which by nine other ministries participated. The MOD was one of the key players in producing the Finnish Security and Defence Policy 2004 report (Government report, 6/2004), but the MOD did not participate in the producing of the ISP. (Government report, 44/2004; Government report, 6/2004)

Additionally, the idea of accepting these assets: of information, image, personnel, and material to be secured does not support the traditionally separate organisation of information security from strategic security. Rather it is one, and only one, part of comprehensive security, and this is why one integrated security vision, policy, strategy and execution is needed. Thus, administrative directives should be established according to strategic security with a philosophy of an expansive and comprehensive nature and the traditional emphasis on techniques should be changed. A technique is a tool for the execution of security, not a separate security branch: even though as a theoretical and conceptual it is useful for categorising security. The situation is the same with the issues of international security and national security, where the division is also artificial as previously described. Furthermore, new approaches for secured assets are described in these interview responses:

> "… as far as I think, we do not need to go far away today to find an example that it was not good for the image of the Ministry for Foreign Affairs that those so-called secret documents were taken away from there … " (I 4)

Empirical research results confirm the hypothesis of a strong causal path between leadership behaviour and organisational effectiveness. (Bass & Avolio, 1998a, pp. 45-56) According to Nissinen (2001, p. 206) the DLM was developed from the transformational leadership model, which has strong correlation to efficiency, satisfaction and extra effort. Thus, leadership is emphasised in the SSM, in these study results and in modelling SSL.

8.4 The future of the MOD

The heuristic hypotheses were that 1) there is a need for a qualitative approach in the name of security in the MOD, and 2) that developing the security of the MOD according to the strategic security model (SSM) is a change agent actor for better efficiency. The results in the MOD confirm both of these heuristic hypotheses. The survey is used as a tool for planning and leading security change in the MOD. A strategic concept of security was the basis for this study rather than a narrow historical realism concept of security. A large scale and horizontal approach to security is required, which is expansive and comprehensive in nature and which combines safety and security. Such a concept of strategic security has similarities with quality control thinking, it includes a wide range of philosophical issues concerning security awareness and an individual's personal responsibility. As a whole, the essential factor in the future of the MOD is operational security improvement through change in organisational culture. The "security is everyone's business" -attitude is critical.

The results have helped to launch a multilevel security programme to improve the situation of security in the MOD, which has already produced the organisational security strategy, and comprehensive education and training procedures. To succeed in changing the organisation a clear vision and willingness to conduct change is needed. Key players are the strategic leaders of the organisation.

Leaders ought to be able to “smell” organisational culture and focus on critical issues. Updating the security system of the MOD, from the perspective of the SSM paradigm, can be seen as a possibility to continue to challenge the reorganisation process of the MOD. This updating includes establishing a clearly structured security system, organisation, tasks and methods (Sonninen, 2005; Wyllie, 2000) in all multidimensional levels of the ministry and the defence establishment and, thus, it also clarifies decision-making and executive capability.

Because of the partially abstract nature of security, the most effective way to increase the security capability in an organisation is education, training, exercises and rehearsals on an annual, systematic basis. Additionally, the international society sector provides guidance in this direction, as its expanded exercise activities to include multinational exercises, which require interoperability from the MOD, both at strategic and operational levels, and not just within the FDF. To improve its awareness of security the MOD has arranged educational and training interventions for the entire personnel and for separate specialist groups. However, the successful implementation of security requires knowledge and skills development and networking.

The researcher has now also been asked to assist in working on the learning atmosphere in the organisation. This has involved more extensive interviewing of employees to construct a view on how to improve the MOD’s capacity for ongoing learning in security issues. Again, we can see how models of learning with origins in social science circles can be applied to the local learning process, and the results are important factors in the assessment of the strength and value of academic findings.

Results showed the presence of the silent killers phenomenon presented in section 8.2. Preventing the existence of the silent killers phenomenon calls for the organisation to establish forums for

open, safe conversation, and then to do something about what they have learned. Open conversation means that the whole organisation, i.e. all relevant participants in the conversation, know the conversation is going on, receive clear signals from the leadership team that it wants candid feedback, have well-understood mechanisms for feedback up the chain, everyone learns about the actions the management is planning so that they can be discussed and modified if need be. The term safe here means that people believe that their status in the organisation will not be affected and that management demonstrates that the bearer of negative feedback is not punished. (Beer, 2003, p. 319) This approach supports the operationalisation of the SSM. Nevertheless, it is an important point to remember those organisations' members does not always resist change (Raelin, 2004), neither do all of those in the MOD. What they are more likely to resist, also in the MOD, is the imposition of change, because imposing change tends to cause people to feel of loss of control. The cautious change leader will, therefore, work hard to find ways to involve the organisation's members in the change process.

As a response to the results of the study after the interview's the MOD established a top level Committee of Readiness chaired by the Permanent Secretary to handle security issues and guidelines, and to set security dimensions. Meeting on a monthly basis in a structured manner that helps the organisation to plan strategic security more intensively. This way security is better able to match the organisational development activity in an overall strategy program. In addition, the status of security improves when the leaders discuss security more intensively. Similarly, an active security-training program was launched for the personnel. The SSL program became an effort that enhanced the formal skill levels of the participants.

Internationalisation and structural changes in the information society greatly affect Finland's ability to secure its vital functions. In addition, the Government reports on Finnish Security and Defence

Policy in 2001 and in 2004 paid particular attention to the threats associated with further international integration. Broadening the scope of security is needed in the MOD because the organisational security performance of the MOD corresponds to international requirements only slightly, partially, or not at all. This is also the case when it comes to national legislation norms and the wide-ranging task of the MOD of guiding the defence establishment. This strategic approach needs to be lead by the top leadership of the MOD because the strategic security perspective will affect the performance of the whole organisation, its partners and also its subordinate-organisations. The international role of the MOD, in the context of EU and NATO, brings special importance for this strategic procedure along with their partner organisations and their requirements for common security standards.

Results showed that especially international institutions' emphasis on security issues will impact Finnish society and the MOD. According to international obligations and national legislation, Finland needs to secure classified information within international co-operation, and co-ordinate these responsibilities through the National Security Authority (NSA) structure. According to national requirements and arrangements a nation has the right to authorise the Designated Security Authority (DSA) to conduct NSA responsibilities and tasks. In Finland the Act (588/2004) designates the NSA to the Ministry of Foreign Affairs (MFA) and the DSA to the MOD, the FDS and the Secret Police (SP). The NSA/DSA performance, as with all security, is divided into strategic and operational levels, as described by an MOD report (MOD, 2004). The study about the effects of a possible membership in a military alliance on the development of the Finnish defence system and on the defence establishment was carried out by evaluating various sections of the NATO Membership Action Plan (MAP), which is a procedure also used in the EU. Security agreements define detailed responsibilities between partners and national legislation supports the fulfilment of international requirements and the national responsibilities by laying down wide-ranging regulations con-

cerning security procedures. (Act 588/2004; NATO, 2001; MOD, 2004; Pekkola, 2002; 2001/264/EY) Thus, strategic level security in the MOD includes the DSA activities with regard to international relationships, national strategic and Government relations, statutory security issues and normative defence establishment guidance. The FDS and the Finnish Defence Forces (FDF) should retain the responsibility for the DSA's operational functions.

The results showed that the national information security strategy (Government report 11 Nov 1999; Government report 4 Sept 2003) as well as national legislation (588/2004) form a common basis for the comprehensive development of information security. The aim of this strategy is to enhance national and international information security, promote national competitiveness and economical capabilities, improve information security risk management, protect human rights and national information recourses, and add security awareness and information. (Government report 4 Sept 2003) In this sense information security is a part of the development of the MOD which emphasises the usability of services, basic human rights and good governance. With this interpretation, information security is a part of the MOD and its performance development, risk management and strategic directive leadership. These may use both qualitative and quantitative gauges and information. The MOD should be aware of the need for security of information, information systems and networks, and that the organisation should act in a timely and co-operative manner to prevent, detect and respond to security risks and threats. Security, security of information and networks should be compatible with the essential values of a democratic society. The MOD should formulate risk assessments in a sufficiently broad-based manner. (Burns-Howell, Cordier & Eriksson, 2003, pp. 17-67; OSCE, 2003; VAHTI, 3/2003; VAHTI, 7/2003) This means that the MOD should review and reassess security, the security of information systems and networks, as well as make the appropriate modifications on security policies, practices, measures and procedures. (Wyllie, 2000, pp. 22-50.) This will not happen without a comprehensive approach to security management. (FICORA,

2002; Hallituksen tietoyhteiskuntaohjelma, 2004; OECD, 2002) Thus, in the name of security the MOD must secure the performance of its core missions and tasks, and identify the guiding organisational security policy.

Perhaps the most interesting overall development in this project was how the leaders of the organisation, the researcher and employee relationships developed. The top management is a strong supporter of the fruitfulness of security that brings relevant knowledge to the organisation. While there is no reason to romanticise the situation with differences of opinions and interests that emerged, the status of security seems to be so robust that further development of security in the MOD is likely. There were many conflicts on issues of substance and authority during the process, and it was stressful for all involved. In the end, the Silent Killers -layer is not so easy to change but however things are moving in the right direction. Resistance for comprehensive security is experienced differently in different parts of the organisation. Developing the security of the MOD through qualitative research methodology allows the researcher to use his own security expertise and opens a wide spectrum of results from the analysis of data. Educationally, research itself adds awareness of security as a part of the participants' self-learning process. Yet, the process is still going on and security is under redesign in the MOD.

8.5 Evaluation of the process

There are many possible explanations for the study results. There might be a failure in the parameters, or in the test battery, or in the analysis, or in the interpretations of the results. The latter explanations are less obvious due to similar results with test triangulation. However, it is apparent that the process can never be successful if the management level of an organisation is not fully commit-

ted to the goals of the organisation, in this case integrating a comprehensive security. Several technical parameters in the VEIVI survey (Cronbach alfa =0,90) and in the strategic security survey (Cronbach alfa=0,92) in chapter 7 added significance and reliability. Because of the small sample the results lose their significance, but nonetheless they may have a supporting role in the interviews in this study entity. The reporting system shows the validity of the research.

Additionally, the reorganisation process of the MOD has not facilitated integration. In this sense, the process of reorganisation cannot be considered to be a success. On the other hand, the lack of resources may reflect resistance among personnel inside the MOD to comprehensive integrated national defence, or to what the reorganisation was designed to achieve; or to the lack of proper information on security; or perhaps because of the perceived resistance of the FDF. Nevertheless, the results support the perception that there is a lack of resources committed to fulfilling the mission of the MOD. Clearly, the results may be interpreted in multiple ways, but no interpretation can adequately explain nor appropriately defend this short- and long-term inability to react effectively to security demands, threats and crises.

This report is academically focused on the literature review, security surveys, interviews and on their results. However, the results of the other parts have affected the interpretations, decisions, and implementation of this research. Furthermore, only non-classified information in the MOD has been attached to this report. However, this does not have a declining, or positive lifting, effect on the conformability of this study. In this study the status of the sensitive nature and the lack of possible classification of information widely used in the defence establishment this phenomenon does not have an effect on the credibility or transferability of this study nor on the research results.

Triangulation is used to combine multiple data, methodological practices, theories and researchers. The aim was a strategy that would add breadth, complexity, richness and depth to the study. Triangulation is not used as a tool for an alternative to validation. However, phenomenography was the main academic methodology used in this research. In this sense the study has used great variety of means to collect information. Both qualitative and quantitative means were accepted. Objective reality has been used as an object only through its interpretations. This study was mainly conducted using the methodology of qualitative research and, thus, the semi-structured interview is presented in greatest detail. Survey questionnaires were used in data collection with the instrumental role of supporting triangularisation. Thus, interpretations after the analyses processes were appreciated with a higher status than quantitative methodology. The meaning of interaction between subject and researcher is flexible. In this reporting the aim was to have transformability and credibility with interaction between reader and report.

Semi-structured interview methodology was chosen, because an existing philosophical and methodological alteration of knowledge about the human situation makes it possible for the researcher in the MOD to go beyond the contrasting alternatives of uncontrolled case reports. The methodology reveals from over-controlled experimental-statistical investigations of personnel of the MOD. The evaluation process was looking for exiting features about the difficult accessible sites. Through the interviews the findings were discovered because of the deeper information of the interviewees. The fact that the researcher had deep information from the MOD organisation also helped to discover findings. Hopefully, this study also inspires other interview researchers to bold pursuits in new domains. When analysing and comparing interview results to the other parts of this research it was unlikely that the results would have been significantly different, even though slight differences could have been possible. One hour per person showed to be an appropriate time for interviewing and the allotted time was understood to be flexible.

However, also short unrestricted written statements in the VEIVI survey and in the strategic security survey were applied to ascertain conceptions of the personnel of the MOD concerning learning about security. This perspective enabled the extending of this research to a larger number of participants in the MOD, but it also produced responses that are more limited in scope, and which are difficult to contextualise within the participants' life-worlds. This approach is entirely valid when taking a wide range security concept, such as the strategic security under investigation, or when applying particular categories of description, just as were used in the VEIVI survey and in the strategic security survey. Nonetheless, the ultimate circumstances are those in which an open technique for eliciting experience is anchored.

It may be claimed that the qualitative semi-structured interview is not academic, but is only a reflection of common sense. On the other hand, an interview process may be criticised as not being objective, but subjectivity is here considered to be an advantage. Following this are arguments about a biased and a non-trustworthy method, including doubts about credibility, because the method rests upon leading questions. Inter-subjectivity, which is considered to be an advantage, may be accused of giving different meaning to different readers. As for being an accepted academic method the semi-structured interview may be claimed as being too individual-dependent and without an academic hypothesis testing it may be seen as only explorative, without quantitative dimensions and too qualitative. Very often a small amount of data leads to claims that with too few subjects generalisation is not possible. Thus, qualitative interview methodology is claimed not to be valid, because it relies on subjective impressions. On the other hand, the chance for the risk of multiple false recourses, and having limited timing recourses, the possibility of increasing economical leverages and, especially, the risks of false analysis, interpretation and reporting is noted. Therefore, the semi-structured interview process is considered to be successful and a useful method in this research process.

The often-stated intent of phenomenography is to find a range of experiences, and thus select interviewees who seem intuitively likely to have different life worlds. That is why within these selected different experiences this research phenomenon is valuable. However, it depends on the assumptions built into the intuitive chances. Such assumptions were set aside by trying to identify them, while understanding the possibility that the assumptions might be false. Furthermore, to avoid making assumptions the consultants for the interviews were used during the preparation period and during the interviews. Another reason for the use of consultants was that the personnel might consider the security personnel of the MOD as belonging too closely to the personnel. To be even more neutral the interviews about security leadership and rescue perspectives were divided between to separate consultants. The health and safety perspective focused on the rescue section with an experienced specialist from the MOD's occupational health care system.

The interviewer is dualistically a participant and a researcher, and it is especially an advantage in this case that the researcher was experienced on the subject. On one hand, it is an advantage that the researcher comes from within the organisation, but at the same time it may be a negative thing because of his role in the organisation. From the security perspective the transformability and dependability of the analysis and the report is improved by using face validity and by using in the different phases of the study an evaluation group of security experts of the Government and the Finnish Defence Staff to check the content of the text.

Presuppositions may be implicit through the selection of participants for the interview and, thus, the idea was to select participants for the interviews by avoiding presuppositions about the nature of the phenomenon, or the nature of conceptions held by particular individuals. By trying to observe common-sense precautions a variety of experiences were maintained. Also, obtaining a cross-section of participants, with equal numbers of male and female participants, or a range of grades,

was avoided, because this would illuminate the assumption that there may be a gender or ability aspect in the perceptions of the participants. Neither were the parameters of variation of experience known, indeed, it was realised that experience may well not have parameters in the mathematical sense. Thus, for this study it is incoherent to attempt anything like statistical sampling. For these reasons departments and individual units were requested three weeks in advance to nominate their representatives for the interviews (Puolustusministeriö, 2004h).

The information and knowledge obtained from the interviews was ambiguous and put the researcher in a dilemma between academic and ethical considerations. This perspective raises the dilemma the researcher faces, i.e. wanting the interview to be as deep and penetrating as possible, albeit not trespassing on the person's privacy. However, by using transcriptions of the interviews, and by the stimulated recall process this phenomenon was avoided. On the other hand, because of one's awareness of the dilemma, respectfulness towards the interviewee was highly appreciated. Risks were taken in getting empirical material that only scratches the surface of the framework. However, there is also contradiction in pursuing academic knowledge and ethically respecting the integrity of the interviewee. The phenomenographic approach also supported this perspective because the conceptions of the interviewee are important, instead of personal ambitions.

Transferability and value of the research results are tested through collaborative insider-professional researcher knowledge generation and in application processes in projects of social change that aim to increase fairness, wellness, and self-determination. The importance of the creation of valid information in this social research is emphasised and in the study report it is explained with details of the study, which focus on security from many different perspectives. From the study perspective this process helps to achieve confirmation through the whole study and helps to secure the conformability, transferability and dependability of the research. In the analysis the object has been

studied both inductively from data premises and deductively from the security conception system. Especially in the interpretation of visible messages, expressions of the documentation and hidden messages has the researcher used his own experience, knowledge and security skills.

The study and its credibility and transferability can be criticised from many perspectives. One way is to claim is that the sample is small, and that the survey has a narrow perspective. Another one may be the claim that the VEIVI survey lacked detailed background information on the participants, which means that the results are considered to be too general. However, during the lifelong evaluation period of the survey it has been found that the background information in this kind of survey, as the VEIVI, does not play a critical role and it does not have importance in the sense of transferability and dependability on the results of this survey. That is because the evaluation results show that the management generally shares a more positive conception of the security situation of the organisation than the personnel dealing with security issues or of what the security situation is in reality. (Turvavironen, 2003; Vironen, 2003) Additionally, findings of the literature review showed that the VEIVI survey focuses more on a learning organisation's operational level than on its strategic level. The organisational security policy section of this survey, according to this interpretation, has a narrow perspective, yet still has the right direction and purpose. Consequently, the future research might also study the possibility of modifying the VEIVI survey at the strategic level.

Follow-up surveys could be done with a bit more specific background information, which would give more detailed and multidimensional information on the status of security inside the organisation. These follow-up surveys could be added as a part of the surveys and analysis based on legislation and the Government guidance and instructions of security. Evidently there is a place for studies of the security concept and security structure of the whole defence establishment from the perspectives of new threats and critical security. The studies should probably conduct on a wider, horizon-

tal international and national level, and not only inside the defence establishment. Another interesting subject for follow-up research could be to study what lies behind the opinions of the personnel.

Security model is seen as an agent for change in the sense that by implementing security the organisation needs to change its policy, performance and practices. Leadership does matter, particularly in times of organisational change, just as in the MOD right now. Important characteristics of leadership are things such as leadership being a mutual relationship between the leader and the follower, leadership being personal as well as leadership being an interaction between leader, follower and context. Leading organisational change may suggest that organisational change is planned linearly, but actually it occurs in a non-linear fashion. In the development of a security-oriented culture in the organisation of the MOD those who wish to make something happen should be able to do so openly, making their attempts obvious, not in secret by trying to keep their efforts out of sight or behind the scenes.

The most stimulating way of reviewing the data were the conversations with expert colleagues and, especially, with the academic experts who bracketed the data. This form of teamwork, during and after the analysis process, was, in the researcher's opinion, the most inspiring experience. As a whole, the use of a variety of techniques and the possibility for different approaches to review the data was valuable. However, this kind of face-validity approach, when used throughout the study process has advantages, also from the perspective that experts seldom see the picture of the whole as broadly as the researcher does.

Totally 21 interviewees are covering sample for this study even though the happening of the starting process of the interviews described in chapter 6 reason this study. Previously the response percentages for inquiries in the MOD has been between 40 to 50 percent (Väänänen, 2003). In the VEIVI

survey 47 % (N=58) and in the strategic security survey 40 % (n=50) responded, which can be interpreted as being indicative. Reasons for the activity in this inquiry, in the perspective of the tradition of the MOD, may be connections to the results of the survey and the enthusiasm of the personnel towards security issues or simple because of the new topic of inquiry. One reason for the lack of responses may be the fact that during the reorganisation process of the MOD the staff have become weary with inquiries, or because the researcher is an insider, or even for a fear of lack of confidentiality in the handling of responses, or because of the organisational culture of the MOD with its passive participation or the resistance towards the reorganisation process. Also, the lack of confidence in the information technology system of the MOD, or even the the lack of trust in the confidentiality of the handling of responses, which has been described in survey responses and repeated in the interaction dialogues with, for example, the Occupational Health and Safety Committee and the Security Team, may have affected the participation percentage. However, no one single reason may be found for the low participation and that is also why other means for collecting data have been used. The multiple data collection perspective also supports the efficiency of the study. When additional representative samples of participants participated in all elements of this inquiry and because the distribution of all personnel of the MOD in this study is the same as the distribution of the whole personnel the results and study process may be evaluated as being representative.

Added value for this research comes from its connections to the real world, real objects, and individuals. The triangular approach, both from the theoretical and practical perspective, which aspects themselves already support the objective of recognising change, give a name to hidden phenomena and bring new ideas with a new approach to be considered. This approach develops individuals, academics and the organisation even during the process and has a continuing effect after publication of this report as well.

8.6 About the references

At the research level the references can be criticised for being narrow, even though in this study. The researcher has referred to official international and national administration points of view. The data from other researchers represent individual opinions from different, mainly post-modern traditions. However, these data have been collected both from domestic and foreign sources. This leads to an opportunity for criticism using the arguments of comparability and reference value of the information, researcher relations, and both value and attitude orientations, especially from the defence establishment's point of view. On the other hand, it is impossible to fully avoid this kind of argumentation, and it can even be seen as one aim of this study to raise this kind of discussion. The reference material includes new literature, both international and domestic, studies, journals and Internet resources. Thus, for example, the strategic planning references are fresh and based on the latest research. Furthermore, from the domestic and military resources both American and Anglo-German references have been used. However, because the MOD belongs to the defence establishment the use of military-based information may be seen as reasoned.

Official documents of the MOD and of other organisations normally have an angle, and many times an especially political angle for their information. Many terms used in this study, such as "security" and "safety", have very sensitive meanings in the defence establishment due to the special status of security policy. This means that these terms cannot directly be translated from Finnish into English and may thus lead to inaccuracy in expression. The problem has been avoided by explaining the applied terminology. For general appraisal the data and references used in this study must be noted to be public in nature, relationships and meanings, because the public nature of data about the MOD may impact the credibility of information and, thus, practice may differ a lot from the theory presented in the text.

9 GENERAL DISCUSSION

It is the objective of the Government to apply the learning organisation concept to the state administration, including the MOD. However, the concept's vague contents and unclearness still requires additional study, also from the security perspective. For modelling strategic security the learning organisation is a useful theory for this study because of its post-modern framework and because the critical security approach, strategic planning, and the learning organisation all have a multidisciplinary foundation. As such, they all have strong social and humanistic perspectives. The learning organisation theory may be a valuable structure even though being idealistic in nature. All these three aspects, critical security, strategic planning and the learning organisation, emphasise the importance of learning, leadership and culture. These features are the cornerstones of the strategic security model (SSM) and this study's entity and establish an interesting although challenging constellation.

9. 1 Theoretical framework

According to the meaning of the SSM leaders of organisations create a vision that clarifies what the organisation stands for, highlights the organisation's purpose for existing and outlines the values and beliefs that define the organisation's culture. When the equal supportive dimensions and risks of the three theories were identified those three theories were chosen as the basis of the empirical study. The study is considered to be a change agent concept in the MOD and in Finnish Society.

The choice of the qualitative approach and its instruments has an important effect on the credibility of this study's findings. Thus, methodological selection becomes even more crucial when the ob-

served indicator is presumed to represent a hidden construct. By using phenomenography as the procedure for investigating the conceptions of the personnel on security and as a method for practical application the generality of the results can be challenged. Having the researcher as observer while being himself inside the object of study is more challenging, especially as the aim is to report academically relevant findings. An added value of the methodological credibility comes from the content analysis and from the use of statistical quantitative methodology in an instrumental manner. However, in the planning phase of the research process it was noticed that the choice of studying security as a new discipline would challenge the hegemony of the professional organisation and the academic division of disciplines, both of which notoriously difficult to change.

Social inquiry is a distinctive praxis, a kind of activity, like teaching. In other words, when engaging in the "practical" activities of generating and interpreting data to answer research questions about the meaning of what others do, the inevitable consequence is a "theoretical" concern about knowledge. While transforming that understanding into public knowledge it consequently leads to concerns about what constitutes knowledge and how it is to be justified in the nature of social theorising. Thus, to understand a practical social action, for example, teaching security, the meanings constituting action must be grasped. Saying that human action is meaningful means claiming that it has a certain intentional content indicating the kind of action it is. On the other hand, an action's meaning may only be grasped in terms of a contextual system of meanings.

From the perspective of an individual as well as of an organisation or of a more extensive social community, observation is one part of knowledge and experience is another part of learning and the formation of knowledge. The world of experiences is important because it helps people understand the paradoxical basic nature of security as, in a way, security involves both the inside and outside of a person's world of experiences. As the study of strategic security proceeded it became obvious that

there really are social phenomena that are both latent and universal in nature. Because human beings are genetically different, universality can take place only through collective consciousness, which is not necessarily tied to culture. Studying security, including meaning perspectives, would thus require a phenomenological research orientation, because security is comprehensive interaction that is not necessarily totally dependent on language and context.

The research orientation is the formation of a model and the construction of individual theoretical assumptions (Niiniluoto, 1983, p. 167) that offers a stimulating theoretical framework for further research both nationally and internationally. Constructing a theoretical framework around strategic planning in the framework of a learning organisation and, especially, the development of security, requires not only basic study but also a wider approach and the synthesizing of information based on existing information. On the other hand, the logical-empiricist approach orientation is not extensive enough because security includes phenomena that cannot be directly observed.

This study has parts that are typical to action research, due to the fact that the researcher is studying his own workplace and has plenty of material related to it, that is, an official security analysis of the MOD. Therefore, achieving neutral objectivity is not possible. It is difficult to convince everyone that the study is completely value-free – some people will think that this weakens the academic value of the study. Thinking more prudently that: "There is no value-free science" (Denzin & Lincoln, 2003, p. 9), the researcher leaves the evaluation of the value of this study to the reader. Nonetheless, even though the empirical data would make a tremendously pragmatic elation possible, it has not been done. Hopefully the study will emit energy into the attractive sphere of security.

This study is a "slice-of-life", which lead to the production of a text that gives the researcher-as-author the authority to represent the subject's narrative using the language of ordinary people.

(Denzin & Lincoln, 2003, pp. 3-4, p. 16 and pp. 21-22) As for the theme, it tentatively identified broad objectives of the research, the phenomenon under investigation, appropriate academic ontological, epistemological and methodological premises, and recognised varieties of this area by studying previous research results, conducting a literature review and investigating both international and domestic norms of security, strategic planning and the learning organisation. Narratives can be described as sociological stories, cultural discourse or historical settings. Narratives are a way of making sense of the world through "human knowledge as a composition of narratives, which is perpetually being constructed in the process of social interaction" (Heikkinen, 2002, p. 14).

Positive idealism is a paradox because it may be an advantage or a weakness of this study, but without this idealism this research would not have started, nor completed. The humanistic tradition and the andragogic, adult education, theoretical framework emphasise participants as adult human beings who are self-directive and responsible learners. As a learner, a human being is eager to learn new thing, and willing to develop skills and knowledge about security and of an organisation. As a researcher, on the basis of the value world and the concept of human beings, it is comfortable to study learners on these same bases. It includes high idealistic enthusiasm for the subject. However, loyalty to academic ethics forces an attempt to use the critical approach, both in activities and when reporting. This easily causes a kind of blindness, which is not easy to recognise. This idealism may hinder covered wishes or seeing possible frustration times or overlapping eagerness now and then.

9.2 About the study process

Qualitative interview study should pay serious attention to the potentialities of a research method, and thus in this case one can draw the philosophical analysis of the last three years about knowledge

of the human security situation linked to organisational development in order to articulate and elaborate on the nature of the knowledge produced in the inquiries. Security organisational development can benefit from the use of interviews as a research method. In particular, this concerns the influence of the interpersonal interaction of the interview situation through the construction of knowledge. It further concerns the importance of extensive knowledge on the subjects and their life situations over longer periods of time to be able to make sound interpretations. Additionally, for critical validation interpretations of the subjects' statements achieve the most efficient outcome for individual lifelong learning, and strategic security learning, and learning of an organisation.

The intent is not to point out the irrelevance of this study for practice, but instead it is an attempt to overcome the gap between research and practice in security in the MOD through an analysis of the nature of knowledge about security. Thus, this is an attempt to develop the epistemology of security practice from modern approaches to knowledge. The aim of this study was not to conduct fundamentalist research on underlying truths in the universe, but an attempt to collect, organise, and successfully communicate forms of practice that lead to the intended purposes.

In this study report phenomenography finds its basic material for analysis in the life-world of the participant. Consequently, bracketing or looking for meaning units, should be accompanied by empathy as a part of the analysis process, along with the use of a variety of techniques. Thus, methodological credibility included content analysis and the use of statistical quantitative methodology in a triangular manner. The requirement of engaging and empathising with the life-world of the participant may involve the avoidance of the espoused objective of phenomenography; the production of categories of description. To conclude, phenomenography, in actual research practice, cannot be seen as the application of a set of rules of procedure. This study report demonstrated some practical

approaches to the issues of technique. To be academic about subjectivity demands a certain fellow feeling rather than technical rationality.

There is a difficulty of bracketing and the value of the process of empathy used in parallel to bracketing as part of the effort to enter the experience of the participant with the use of a variety of techniques. These guidelines provide a theoretically sound framework within which a phenomenographer may provide an account of nine research procedures. This demonstrated approach has also provided a mechanism to learn from the procedure, and it offers a mechanism through which others might collegially learn from each other.

The role of researcher and participant having interaction with other participants could be problematic and is at the least a multidimensional role, i.e. researcher, participant, learner, inventor and active leader. The key problem is simultaneously delivered information; give an objective and establish new information in interaction with the participants. It is challenging to simultaneously handle multidimensional information, even classified information, and to take care of official security officer duties as well as academic researcher tasks. On the other hand, the aim was to broaden and deliver personal understanding and theoretical information to the organisation. This task in the MOD is not easier as a means or a tool neither for security information nor as a change agent. As mentioned above there are simultaneously numerous different roles to be taken care of. However, in the end the reader in interaction with the text decides whether it has been a success, or not.

This study follows the constructivist approach (Greenwood & Levin, 2003, p. 145) and supports the learning organisation paradigm. Thus, the transferability and value of the research results are tested; through collaborative insider-professional researcher knowledge generation and the application processes in projects of social change that aim to increase fairness, wellness, and self-

determination. The importance of the creation of valid knowledge in social research is emphasised, and in the study report is details of the study are explained, with the focus on security from many different perspectives. From the study's perspective this process helped to achieve confirmation throughout the whole study and helped to secure the conformability and transferability and dependability of the research. In the analysis the subject was studied both inductively from data premises and deductively from the security conception system. The data was pulled apart using the phenomenographic approach to find showed messages, expressions of the documentation and also hidden messages. Especially in the interpretation of hidden messages has the researcher used his own experience, knowledge and security skills.

The credibility and transferability of the study was improved by using face-validity, an evaluation group of security experts from the Government to check the content of the text. The evaluation group analysed the material and the results of the survey. A negative point of face-validity is that experts cannot figure the study the same way as the researcher does. By far, the most stimulating part of the data review was the conversations with expert colleagues and, especially, with the academic experts who bracketed the data. As a whole, the use of a variety of techniques, and the possibility of using different approaches to examine the data was valuable. However, although this kind of face-validity approach used throughout the study process has its advantages, it also has the weakness. Experts seldom share the picture of the study entity as broadly as the researcher does.

The study and its credibility and transferability can also be criticised from many perspectives. One is to claim that the survey has too narrow perspective partially because of small sample. Qualitative research will harbour critical voices that challenge reliability on this study. The modern academic requirement for developing context-independent knowledge, which is ideally in the form of universal laws of human behaviour, is in contrast to this study's post-modern approach emphasising that

information gained within one context is not necessarily transferable. Neither is it necessarily translatable to, nor commensurable with the knowledge of other contexts. This lead this study to an interest in contextualised local and narrative knowledge.

Added value for this research is gained by ecological relevance, meaning that the phenomenon is studied in a natural context or in a natural ecology, i.e. such as they appear in reality and, thus, this research has ecological transferability. The research was conducted in real life, with real objects and individuals, with a triangular and multi-disciplinary approach both from the theoretical and practical perspectives. These aspects themselves already support the object to recognise change, give names to hidden phenomena and bring new ideas with new approaches to be considered. This approach develops individuals and the organisation already during the process and the study also continues to affect even after this report is published.

9.3 Strategic planning perspective to learning organisation

Instead of the traditional learning organisation theory, the strategic planning paradigm was used to achieve more competence for the theoretical context. Yet, the strategic planning approach supports the learning organisation thinking, which is actually a new generation modification of the traditional learning organisation theory. The balanced scorecard (BSC) approach also supports the learning perspective of an individual as a part of strategic leadership. And, when the term strategic is understood as the learning of the top leaders, strategic security means organisational learning and the top leaders learning of security. Thus, developing security is developing the operational functions of an organisation and the learning of individuals that will together be a driving force of the learning organisation. And so, to create a challenging learning environment, the future learning

organisation has to: bury bureaucracy, bury rigid hierarchy, attract real talents, create a continuous learning environment, reward performance, remove socio-ethnic barriers, and create a non-threatening and secure atmosphere.

By the end of the 20th century participative strategies were noticed to be inadequate in meeting new, rapidly changing challenges, as these strategies were slow, and often did not deal with the basic issues standing in the way of flexible, proactive, resources deployable organisations. As a result there was increasing support for organisational transformation change and for a strong leadership. This critical philosophy and methodology transformation came to form an increasing link to organisation strategy and, thus, strategy orientation increased vitally.

Organisational performance as a whole became the imperative thrust of organisation change agents, in spite of the increase in job security and work satisfaction. This was a controversial move for socio-technical practitioners to make, and has been criticised as selling out on humanistic values. On the contrary, it has had the consequence of making people's humanist issues critical to the agenda of strategic change. In the humanist and social approach strategic change has also created a new profession of security leaders increasingly represented on senior executive teams and boards. The role of the 21st century security leader is more and more the change agent of an organisation, instead of to the historically traditional chief of security. As a change agent the security leader is in the centre of the renewal and controlled change of an organisation, with the focus on strategy orientation and the organisation learning process. Additionally, the strategic security model places considerably great emphasis on traditional safety and psychologic-sociologic dimensions. In the beginning of the 21st century, thanks to the link to strategy, the strategic security model practitioners are becoming heretics outside the organisation installations, in the community and society and are oc-

cupying an influential place in the organisation boardroom. Additionally, comprehensive strategic security is more likely to become a confessed strategic change practice of a variety of organisations.

Development and the developing procedure are learning processes for both the individual and the community, meaning that the structure of the a learning organisation is flexible and it can include at the same time chaos and order. The learning organisation makes the structure flatter and aims at reaching a common vision for the education of personnel. This is so because the learning organisation focuses on openness, horizontal structure, self-evaluation, feedback and on making sure that the skills and competence of the organisation are widely understood. In the 21st century an organisation must create a constant learning environment, a non-threatening working environment where people can communicate and collaborate with one another, a diversified environment for people to think differently and value each other's thinking, new ways of looking at problems, and a culture that effectively leverages talent. Continuous global transformation, mounting technological enhancements integrated with organisational learning does not clarify the concept of the learning organisation.

Partly as a result of this change, in most leading organisations the old bureaucratic security structures have been stripped down, hierarchies of entire organisations have been lowered and turned into networks, decision-making processes have been sped up with a high level of security involvement introduced, flexible teamwork has been set in place, enlightened safety and security resource processes with high levels of employee involvement have been introduced. The world of security is substantially different from what it was around the middle of the previous century. The value drivers, however, have been more instrumental than humanistic ones.

9.4 Strategic security

Strategy is at the core of the strategic security model (SSM) system. Strategy constitutes the broad priorities that an organisation plans to pursue in order to fulfil its mission. The priorities must be consistent with the organisation's unique situation and fit with one another in an effort to respond effectively to challenges and opportunities. The strategic security leadership (SSL) system centred on expansive security must overcome the organisational inertia that tends to immobilize virtually any change program. Strategic security is a development model for the organisations for strategic level leadership. Potential signifies a dimension reflecting total personal capabilities in the development of a learning organisation. According to the constructivist conception of learning, the process in which the potential is utilised, or enlarged is merely intra-personal.

The nisus of the model is the strategic security vision of the organisation. Without a clear understanding of the strategic vision, development of indicators for the SSM is fruitless. All perspectives must relate to the strategic vision, and each perspective relates to the others through the central vision driving the organisation. As tactics are described, the data collected in the SSM reflects the organisation's progress toward achieving the goals delineated by the strategic vision. A well designed SSM bridges the gap between long-term strategies and day-to-day action by aligning performance measures with the critical perspectives of the organisation. The SSM provides senior executives and leaders with the ability to track performance against established strategic and operational goals. The SSM takes the strategy of the organisation, converts it into a form that everyone understands, and communicates the plan and its requirements to everyone in the organisation.

The new concept of Strategic Security Leadership (SSL) of a learning organisation attempts to move the emphasis of leadership from ordering and strict control to leadership that makes subordi-

nates commit to it. Shifting the emphasis does not change the leader-centricity of decision-making and responsibility, but requires the leadership to behave with increasing flexibility and emotional intelligence. The requirements are justified with the fact that with the commitment of the subordinates the situational sensitivity and efficiency of the entire organisation improves.

Leadership is a non-hierarchical concept and, thus, SSL should be found throughout the organisation, as should acknowledgment of the significance of encouraging leadership behaviour at all levels of an organisation. The mission of key security leadership is the maintenance and modification of culture to an organisation's changing environment. The culture is based on a contingency model and consequently the role of security leaders is to be the embodiment of the culture, because their behaviour is closely observed. The results of this study showed this to be the case in the MOD. Additionally, it is one of the most admirable human qualities when people can identify the difference between what others say and what they do. It becomes clear that the role of the leader is to be an example of the security culture, crucial to both the continuance of appropriate elements of the security culture, and equally significant in the process of constant adjustment in response to a changing external environment.

Strategic security as a high leverage mechanism requires pro-activity, initiative, creativity, and ingenuity. The strategic security cluster requires a rigorous process and commitment, but its benefits are worth the costs. Even if only a few of the elements of the strategic security cluster are adopted, the research suggests that a competitive advantage is to be gained. Best of all, much of the strategic security cluster is simple common sense: getting agreement on vision, strategy, strengths, and weaknesses; measuring essential performance numbers; and focusing not just on financial outcomes but also on the issues that will affect the future outcomes. The strategic security cluster leverages common sense into a substantial competitive advantage. Successful performances turn to indicators

measuring their success. For a strategic security cluster gauge, which offers a relevant and accurate picture of an organisation's health, the organisation may leverage additional important indicators of current and future performance. A strategic security cluster measurement is not complete without strategic performance measures of shareholder, employee and customer satisfaction. These indicators often detect the warning signs of trouble early enough to take corrective action before core performance begins to suffer.

The risks of the SSM are, for example, that the commitment of the top leadership is not strong enough, huge amounts of data is collected, short term and day-to-day metrics are overemphasised and the organisation chooses the wrong indicators. Additionally, the risks include that the organisation sets unrealistic goals, the data to be measured is difficult to collect, the organisation lacks communication, the SSM creates an enormous amount of resistance, change is performed too slowly and the organisation may have too many overlapping systems or that the framework has the wrong strategy basis.

The SSM responds to the challenges of the MOD. However, the heuristic hypotheses are that this model may also be transferred elsewhere in state organisations and that it may be adopted in the private sector, too. In a flexible manner it can be used at all levels and sectors of an organisation and it can conceptualise security at both strategic and operational levels inside a sector or level even though this report concentrates on the environment of the MOD organisation. Nevertheless, this model is more or less under criticism, because the basis is very much theoretically emphasised.

9.5 Generalisation

Generalisation of knowledge has been a persistent problem in the modern academic world. The transferability of generalisation depends on the relevance of the terms being compared. Relevancy depends on the exact narrative of the study, in the sense that the generalisation of the knowledge is more dependent on the receiver than on the resource of the knowledge. In the traditional academic research approach the responsibility of the generalisation is set to the researcher. In this study, generalisation is the responsibility of the researcher to produce enough information for the receiver to make a decision concerning the generalisation. Generalisation about individuals is of value, but it is important that the individual's unique experience is not lost. The individual profile is a necessary background against which the meanings of quotations will be viewed, because it provides a necessary counterbalance to any tendency to attribute meaning out of context.

The transfer of the information of this study rests on transferable generalisation, which involves a rational judgement about the amount to which the findings from this study may be used in other situations. Successful generalisation of the information of this research on human behaviour depends on extensive documentation and argumentation. In this case it is the preceding holder, which has the most similar attributes to this actual case, and which is selected as the most relevant precedent that is the most equivalent. The transferability of the generalisation hinges on the extent to which the attributes from this study compared to others are relevant. On behalf of what was just mentioned generalisations include a process of reflection rather than a structure of rule-based interpretations. Knowledge is context-bound and, therefore, generalisation is an active process of reflection; concerned actors decide whether or not the actual information is useful in the new context. The level of participation in this study enables the generalisation of results to cover the whole MOD.

9.6 Conclusions

Previously job security and work satisfaction were emphasised, but organisational performance as developed as the key driver for organisation change agents. Thus, the new challenge for change agents is to provide security leaders with a design for the way forward while redesigning organisations for the 21st century. The SSM may be explored as having the potential for sustainable practices for recovering organisational actions, the construction of human capability, contributing to community expansion and renewing the biosphere. This new approach for change agents may be seen as a new role for SSL; to assist in the redesigning of the organisation to accomplish exceptional performance that, in fact, contributes to meeting human needs as well as the goals of a healthy organisation. With the help of the SSM, the organisation's human sustainability initialises the capabilities of its personnel, creates a healthy workplace, and contributes to the welfare of the surrounding community. By taking care of the security issues of the organisation, the use of the SSM simultaneously develops the comprehensive performance of the organisation pro-actively, and more smoothly prepares for the changing threats in the environment as well as the inner cohesion of the organisation with openness and wide-range social interaction.

The study process in the MOD showed that there are several steps that must be taken to limit the dangers of the reluctant compliance syndrome: explain change, agree on new measures, maintain a longer-term vision, watch out for silos, measure cooperation, repeat collective purpose, tolerate mistakes but not poor performance; and do not grind down. Once created, the expansive SSM should become a part of the organisation's every day life. It should be embedded into an organisation's operations as a standard decision-making tool. The strategic security cluster makes the results of changes measurable. Organisation can learn what models yield the best long-term results, other

words, what works and what do not. The strategic security cluster can give warnings about problems ahead or signal opportunities. It should also be used as the focus of continuous improvement.

Contents-wise the expansive paradigm of the strategic security cluster does not bring any real, new information to the study of security, rather vice versa; the paradigm strengthens and clarifies those cornerstones that security, with excellent results, has always been based on. However, elevating emancipative security to the starting point of modelling and learning for security is new. This expansive paradigm of security is not an academic theory, but it is a model that produces excellent learning results in organisational security and in organisational change development. The heritage of the realistic tradition is that it is a weakness to change one's mind. Organisational change is the condition of post-modern life in reality and, thus, critical security gives room for change.

This study emerged out of a desire to contribute to the development of a self-consciously critical perspective within security studies in Finland. Simply bringing together some of the perspectives of strategic security, the strategic security model (SSM) and strategic security leadership (SSL) serve to make challenges to orthodoxy more clear, and to signal that critical approaches to the learning organisation, strategic planning and critical security studies are more than a passing fad entertained by a few scholars. Still, undoubtedly, some important perspectives have been left outside.

While emphasising interaction, the critical security approach also supports multidimensional expertise and the systematic research approach. Follow-up surveys could be done with a bit more specific background information on sample, which would give more detailed and multidimensional information on the status of security inside the organisation. Evidently there is a place for multidisciplinary studies of the security concept of the whole state administration from the perspectives of new threats and critical security. It should probably be conducted with a wider horizontal, international

and national, or state level framework, and not only inside Finnish society. Another interesting subject for follow-up research would be to study what is behind the conceptions of the personnel, and what kind of psychological aspects are effective in the construction of the concept of security.

The outcome of this study will be expanded when the importance of strategic security in conceptualising dynamic organisational change in a changing environment is understood. Certain subjectivity, which is unavoidable in this kind of qualitative research where the researcher is practically experienced in the area, should be reasoned. The triangular method was used in order for subjectivity not to affect the results of this study. Empirical study has aspects typical to action research, due to the fact that one's own work was being studied. From this perspective achieving total objectivity was not possible.

The level of difficulty brought on by the vastness of the topic in relation to its academic depth is visible. Each topic in each chapter could probably serve as an exhaustive framework per se. According to the academic view, the formation of a theory is still one of the most important ideals of the academic world. It is possible to define the theoretical context for strategic security so that it passes the critical scrutiny of the academic community. The feedback information accumulated for several years on the strategic security of the MOD showed the practical value of feedback, and its efficiency as the basic solution for the strategic security approach.

Individuals share different preferences in their way of shaping information. Personal epistemological orientation is strongly iconic, as the many figures and pictorial presentations illustrate. The main purpose of the figures in the text is to help the reader to clarify the ideas and concepts. Thus, as an entity each part of the research supports the other elements and on the other hand creates the basis for lower-level analysis in the hierarchy of the tools. The results of the empirical part of the research

are important, both for the participants and especially for the researcher. The input of the whole process for personal learning as a researcher, a person and as a strategic security leader cannot be emphasised too much. However, even more important is the development of the concept of security and the effectiveness of the strategic security process in the organisational system of the MOD.

This study concentrates on normal conditions of society, even though as a public authority the MOD has readiness responsibilities in disruptive and exceptional situations (European Union, 2004; the Emergency Powers Act (1080/1991); the State of Defence Act (1083/1991). However the principle of having the organisational functions, structures and procedures be the same both in normal situations and in exceptional situations does not make vital difference in the perspective of this research. The proper response to the epistemological, ontological and methodological issues that were raised is to reconstruct relationships between the new conceptions of security among the strategic stakeholders in a learning organisation. Acting and thinking, practice and theory are linked in a continuous process of critical reflection and transformation, both in the organisation under survey and for the researcher as a human being.

9.6.1 Practical implementation

The strategic concept of security has several practical implementations. Increased international requirements of security set a requirement for a dynamic approach to changing the concept of security in Finland and in the defence establishment. The impact of security is horizontally breaking barriers and security does not follow national borders, but is influencing all sectors of society. Thus, the division between internal and external security is artificial and the trend is towards a wide-range comprehensive strategic concept of security. Technical information security has lost its status as a

separate driving actor of security to the trend of comprehensive operational security. Security is increasingly becoming a crucial factor of international and national competitiveness, linking security to the success factors and to the change actors. However, in order to change conceptions of security new modelling for structuring the concept of security is necessary as is free open discussion of the strategic concept of security.

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APPENDICES

1. Veivi survey questionnaire
2. Strategic security survey questionnaire
3. Safety interview structured questionnaire
4. Security leadership interview structured questionnaire

APPENDIX 1

VEIVI SURVEY QUESTIONNAIRE

The survey consists of 22 statements, which are divided into five sectors. Every statement offers an opportunity for the respondent to insert his own comments. The last statement in the questionnaire is reserved for free personal comments, information and feedback.

Response scale:

1) strongly disagree with the statement
2) somewhat disagree with the statement
3) undecided
4) somewhat agree with the statement
5) strongly agree with the statement

Security policy

A. I know the security principles of the Ministry of Defence (MOD)
B. There are clear security principles (security policy) in the MOD
C. Occupational health and safety are well taken care of

Security culture

D. It is everyone's business to take care of the security of his work place
E. I understand what the security arrangements of my work place are aimed at
F. The guidance of guests has to be improved in advance, for example, in the invitation
G. Guests must be escorted to and from the reception area
H. When you pass through a door in the building you must always check that it is locked
I. I am ready to change my habits if it is reasonable and needed for security reasons

Security instructions

J. The personnel security instructions are updated
K. There is follow-up and control over the following of security instructions
L. I know the emergency instructions (including fire, bomb threat, break-in, suspicious package, threatening behaviour, etc)
M. There is a system to inform the authorities about abnormalities and the neglect of security
N. Enough attention is paid to security issues

Security control

O. It is always easy to notice who is a stranger and who your own personnel are
P. You must always wear your identification card visibly at work
Q. You always ask from a lone stranger where he is going
R. Deliveries are controlled properly (for example, cleaners and service people)
S. Security control is good enough

Information security

T. Useless and unnecessary classified documents (paper, hard copy and electronic) are always destroyed safely
U. The passwords in our office are truly secret
V. I am completely aware of the information security instructions

W. Free personal comments, information and feedback

The VEIVI security survey definitions

The five sectors of the VEIVI survey are the security policy of the organisation, security culture, security regulations, security control, and information security. In the VEIVI survey analysis organisational *security policy* differs from the general meaning used by the MOD (2004e), meaning a plan of security action, or statement of ideas adopted by the board of the MOD. It includes the goals of organisational security, functional principles of security and procedures, and contacts for dealing with enquiries. *Occupational health and safety* consist of both the psychological and physical security of the personnel. *Security culture* means the security customs and social institutions of the personnel of the MOD, and how organisational security policy has been practically implemented. Security culture includes security principles and how they are conducted, in terms of co-operation, openness and trust. (Turvavironen, 2003)

The VEIVI's *information security* definition follows both Kerko (2001, p. 83) and NATO (2001, p. 83) definitions with the meaning of a proper protection of information, information systems, communication and services both in normal and crisis situations using legislation and other protection methods. The confidentiality, integrity and availability of information are protected against threats and losses caused by hardware and software malfunctions, natural catastrophes, and acts of hateful, careless or unqualified people. Information security means that functions are conducted according to the principles of confidentiality, integrity and availability whilst at the same time trustworthiness, liability and availability of knowledge are protected from risks and threats caused by malfunctions of electronic equipment, system disturbances, or natural disasters and environmental accidents. Security control means that functions are conducted according to existing and accepted security plans and instructions. Access control is needed to minimize security risks and to develop existing security activities.

The VEIVI's *personnel security* definition follow Kerko (2001, p. 83) by defining activities that aim at controlling prescribed risks and threats that are a risk either for the personnel generally or their capability and resources to perform their work. Personnel security also means protection from threats to organisational vulnerabilities by securing the functional performance of the organisation. The same concern is shared with clients, partners and other interested outsiders. The principle of personnel security is continuousness and it supports occupational health and safety. The aim of personnel security is to proactively manage risks by identifying positive means to control work processes, work administration and business using good corporate governance procedures.

The VEIVI's *physical security* definition follows both Kerko (2001, pp. 84-92) and VAHTI (01/1999) definitions and means high-level facility security and includes security control as a part of organisational functions. Declarations, permits and certificates concerning security are the responsibilities of the Head of Security and these and other legally required certificates are documented in a common register. Physical security includes the control of clients, controlling the movement of personnel, physical surveillance, technical surveillance and security equipment, building protection and special facilities.

The VEIVI's *occupational health and safety* confirms and guarantees the security and health of the personnel in all circumstances. It includes active efforts to keep up the capability of personnel to work and, when needed, improve that capability. To establish and maintain security and favourable work practices demands a process of focusing on the self-perception of the work place and aiming at continuous improvement. (Turvavironen, 2003)

APPENDIX 2

STRATEGIC SECURITY SURVEY QUESTIONNAIRE

The survey consists of statements as questions to generate comments. An open question at the end offers the opportunity to insert personal comments, information and feedback

Response scale:

1) strongly disagree with the statement
2) somewhat disagree with the statement
3) undecided
4) somewhat agree with the statement
5) strongly agree with the statement

Capability to respond to threats

A. The Ministry of Defence (MOD) spends enough resources on the surveillance of the change of threats?
B. The MOD is able to respond to the change of threats?
C. The change of threats affects the actions of the MOD?

Capability to react in a crisis situation

D. The MOD organisation has great readiness to react effectively in a crisis situation?
E. The MOD has a sustainable and great readiness performance capability in a crisis situation?

Comprehensive national defence

F. From the point of view of total national defence the organisation of the MOD is functioning effectively?
G. The integration of the total national defence is under the control of the MOD?
H. After the reorganisation process of the MOD control over the integration of total national defence is easier than before?

Capability for rapid changes within the organisation

I. The structure of our organisation can be rapidly changed to respond to incoming challenges?
J. Free personal comments, information and feedback.

APPENDIX 3

SAFETY INTERVIEW STRUCUTRED QUESTIONNAIRE

The interview consists of five safety schemas, which are divided into an equal amount of sectors. Every schema and sector offers an opportunity to the interviewee to insert his own comments.

1. **Threats**

1.1 Threat analysis in the MOD and in the interviewee's department
- What analyses exist?
- Interviewee's own conceptions of the threat and risk analyses?

1.2 Threats in normal situations
- Threats in the facility?
- Staff health emergencies?
- Threats and risks from outside of the facility?
- Interviewee's own conceptions of the threats in normal situation?

1.3 Threats in disturbing and exceptional situations
- Threats requiring covert activities?
- Special threats concerning one's own department/unit?
- Interviewee's own conceptions of threats in disturbing and exceptional situations?

2. **The performance of MOD personnel in avoiding threat situations and in decreasing risks**
- Safety and security awareness in the MOD?
- Arrangements for visitors?
- Physical situation?
- Defence against intelligence and surveillance?
- Reporting systems?
- Safety and security directives?
- Responsibilities?
- Interviewee's own conceptions of the performance of MOD personnel in avoiding threat situations and in decreasing risks?

3. **The performance of MOD personnel in threat situations**
- Alarm systems?
- Rapid reactions and first-aid systems?
- Safety and security trained personnel in the MOD?
- Debriefing systems?
- Co-operation with other authorities?
- Interviewee's own conceptions of the performance of MOD personnel in threat situations?

4. **The organisation of MOD safety and security**
- Threat, risk and safety statistics and analysis systems?
- The role of management?
- The comprehensive safety leadership system?
- Organisation of rescue procedures in the MOD?
- Surveillance systems in the MOD?
- Occupational health and safety issues in the MOD?
- Occupational health care in the MOD?
- Interviewee's own conceptions of the organisation of MOD safety and security?

5. Safety and security training and education

- First-aid training?
- Rapid reaction rescue training?
- Other safety and security training?
- Interviewee's own conceptions of safety and security training in the MOD?

APPENDIX 4

STRUCTURED SECURITY LEADERSHIP QUESTIONNAIRE

The interview consists of five security schemas, which are divided into an equal amount of sectors. Every schema and sector offers an opportunity to the interviewee to insert his own comments.

6. Framework

6.1 The vision, mission and strategic goals of the MOD?

- Interviewee's own conceptions of the vision, mission and strategic goals of the MOD?

6.2 The values of the MOD?

- Interviewee's own conceptions of the interim values of the MOD?

7. Personal aspects of the interviewee

- Task and the status in the organisation?
- Links to the organisational security issues?
- Interviewee's own conceptions of the performance of MOD security?

8. Threats

- Responsibilities for security issues in the MOD from the point of view of the interviewee?
- The security directives, responsibilities, and arrangements?
- Interviewee's own conceptions of the threats to the MOD?

9. The future of the MOD from the point of view of security

- The importance of security in the MOD?
- The status of security in the MOD?
- Interviewee's own conceptions of the future of security in the MOD?

10. Additional issues according to the interview

- Interviewee's own conceptions of the affairs that need to be handled?