

# *Self-managing teamwork and positive work outcomes*

*Master thesis*



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## PREFACE

During the last few decades working in self-managing work teams has become very popular. Organizations introduce self-managing teams to work more efficiently and more competitively, and to offer the employees a more pleasant and safe work environment. Working in self-managing teams has also been introduced at the real estate management and engineering office of the Ministry of Defence section West. This organization gave me the opportunity to study whether the introduction of working in self-managing work teams has resulted in positive outcomes for their employees.

I have conducted this study in the framework of the Master thesis for the study Business Administration (specialization Consultancy Industry) at the Vrije Universiteit Amsterdam. Working on this study has been an interesting and valuable experience that resulted in the findings presented in this Master thesis.

I would like to thank the management and employees of the real estate management and engineering office of the Ministry of Defence section West for giving me all the information needed for this study and for their friendly cooperation.

I would particularly like to thank Mrs. De Lange who was my supervisor for this Master thesis at the university.



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## 1 SUMMARY

Many organizations have introduced self-managing teams to work more efficiently and more competitively. The real estate management and engineering office of the Ministry of Defence has recently been reorganized, involving a reshuffling of persons and functions and a reallocation of tasks, and the introduction of self-managing teams.

After one year of working in the self-managing work teams the Ministry of Defence held a survey to examine whether the individual employees were satisfied with their new working situation and with working in the new form of teamwork. The presented thesis aims to examine the following question: Does working in self-managing work teams have positive outcomes for the employees in this governmental military organization with regard to satisfaction, cohesiveness, view on management, employee involvement and confidence in the future.

This thesis is based on a literature review and analysis of a longitudinal study conducted in 2001 and 2004. The changes from 2001 (when there were not self-managing work teams in this organization yet) to 2004 were used to examine the impact of the new form of teamwork.

In chapter three the results from the literature review are presented and in chapter five the methodology is elucidated. In chapter six the results of the 2001 survey data and the 2004 survey data are analyzed with the help of “Statistical Product and Service Solutions” (SPSS). In chapter seven the findings of this study are discussed in more detail.

This study has shown that working in self-managing work teams has had positive effects for employees with regard to satisfaction, cohesiveness, view on management, employee involvement and confidence in the future. It can be concluded that the introduction of self-managing teams has been the right decision in terms of worker well being. These findings are also of importance to consultants as governmental organizations usually turn to consultants for their advice before implementing such far-reaching organizational changes.



## 2 INTRODUCTION

During the last few decades both globalization and the fast developments in the information technology have had a great impact on the markets and environments in which organizations operate and on the way organizations function (Cummings & Worley, 2005). During the last decades the industrial society has been transformed into a so called “knowledge society” that creates, shares and uses knowledge for the prosperity and well-being of its people. As a consequence, organizations are confronted with fierce competition and increasing demands of customers with regard to product uniqueness and product or service quality.

In order to survive in this highly competitive global market organizations have to work as efficiently as possible to realize lower costs.

Organizations have also become aware of the fact that high organizational performance is not only achieved by the application of the latest technological devices but that employees play a vital role too. Practice has shown that a competitive advantage can be achieved thanks to the employees’ knowledge, skills and competences. Consequently, organizations have realized that the employees should be considered as a valuable organisational asset (Walton, 1999) and that employee involvement could lead to performance improvements, greater employee flexibility, commitment and satisfaction (Cummings & Worley, 2005).

From this “Human resource” perspective the classical bureaucratic organizational structures were no longer adequate and a more flexible organizational structure was required. As a consequence, numerous organizations have implemented reforms in organizational structure and job design.

Fundamental to the view of teamwork is that it empowers the employees by providing them the opportunity for increased control over their work. As a result, they can become more committed to the organization and may use more skills which may also lead to an improvement of organizational performance (Harris & Beyerlein, 2003).

Besides the fact that teams are considered to be important from a human resource perspective it will become clear that other perspectives such as the employees’ perceptions also play an important role.

### 2.1 Subject of the study

This study is concerned with the employees’ experiences with teamwork and aims to examine *the impact of self-managing teams on positive work outcomes for the employees at a governmental military organization*. To find an answer to this question first attention will be given to subjects



related to the concept teamwork and the concept self-managing teams will be described. Further information will be given on the positive indicators of worker well being (cf. the label positive outcomes in Figure 1), and attention will be given to leadership.

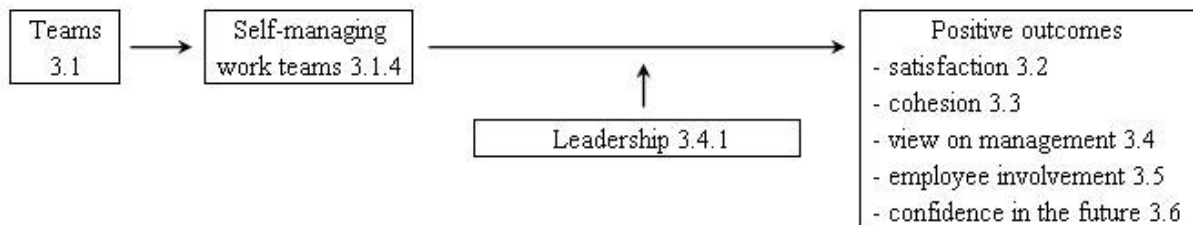


Figure 1  
Theoretical framework

This framework has resulted in the following sub-questions:

1. What are self-managing teams?
2. What is satisfaction?
3. What is cohesiveness?
4. What is meant with “view on management”?
5. What is employee involvement?
6. What is confidence in the future?

This study can be described as a longitudinal study as it comprises two measurements of data from subjects that are selected from the same group or population at two measurement occasions. This type of design is essential if the purpose is to measure social change as it can provide fuller information about individual behavior. The time lag that is used often depends on the time the researcher and participants have available for the research project, however it should be noticed that when the time interval is too long, many changes in the work environment might have occurred, that might lead to confounding results (De Lange et al., 2003). The analysis in this thesis involves comparison of data across a period of four years. Longitudinal data make it possible to measure differences or change in a variable from one period to another and can be used to locate the causes of social phenomena and sleeper effects, that is, connections between events that are widely separated in time (De Lange et al., 2003).



## 2.2 Organization

In the course of 2002/2003 the real estate management and engineering office of the Ministry of Defence was reorganized. This reorganization involved a reshuffling of persons and functions and a reallocation of tasks as the work would, from that moment on, be performed in self-managing teams. The workforce consists of both military and civilian persons who are active as architects, designers, constructional engineers, technical experts, electricians, mechanics and all kinds of other technical experts as well as lawyers and administrative personnel.

Working in self-managing teams was considered to be essential for the governmental organization to work more competitively in the period of economic recession in which the government had to take practical measures to cut governmental expenditure.

The Ministry of Defence values a good quality of work life for their employees. They try to offer a pleasant as well as a safe work environment for their employees.

After one year of working in the self-managing teams, the employees' representative advisory council decided to administer a survey among all employees. They wanted to find out whether the individual employees were of the opinion that working in self-managing teams contributed to the improvement of the employees' satisfaction, interest in their work and confidence in the future. The results of this survey were considered to be an important source of information for both the management and the employees' representative advisory council to get more insight into the employees' experience of the new working situation.





### 3 THEORY

In section 3.1 attention will be given to teams. This will be done by explaining why organizations introduce teamwork, the difference between a group and a team will be indicated and a categorization of the various kinds of teams will be made. As the focus is on self-managing teams, the several stages in which self-managing teams develop will be described. In the following sections the positive work outcomes will be explained. In section 3.2 attention will be paid to the dimension of satisfaction and in section 3.3 to cohesiveness within teams, in section 3.4 the view on management and in section 3.4.1 leadership will be discussed; as this plays an important role in the employees' view on management. In section 3.5 attention will be given to employee involvement, and in section 3.6 confidence in the future will be discussed.

#### 3.1 Teams

##### 3.1.1 Why organizations introduced teamwork

During the last three decades many organizations have embraced teamwork in order to meet the challenging global market. In the first half of the 20<sup>th</sup> century the emergence of industrial engineering dominated. At that time the concept of “scientific management” developed by Frederick Taylor was implemented in many organizations. This concept implies that tasks, for which often unskilled workers were needed, were broken into parts, simplified and changed into standardized procedures. In this way more efficiency could be gained and a higher productivity could be realized. In those days organizations were characterized by functional departments that carried out repetitive tasks to maintain high production volumes (Montebello, 1994). This period can be characterized as the era of mass production in which the emphasis was on production and efficiency (Anderson & Narus, 2004).

During the 1960s, organizations introduced the functional matrix structure which was based on the functional organizational form. Coordinating the activities of the various departments was required to develop more innovative products (Cobbenhagen, 1999). During this period the “human resource” perspective and the contingency theory emerged. The advocates of the human resource perspective pointed out that the employees would become more valuable to the organization if the employees would be treated fairly and respectfully and if they would be allowed to participate in the decisions related to their work (Walton, 1999).

The contingency theory implied that the most appropriate structure for an organization is the one that fits the organization's environment best, its scale of operation, degree of technology, its strategy and its size (Cummings & Worley, 2005).



Besides these perspectives, the organizations' efforts to speed up innovation processes have had a great impact on the organizational structure and work design. The industrial society transformed into a knowledge-based society, as a result of the fast technological developments, the globalization and the influence of the rapid changes in the information technology. Due to all these changes organizations required more organic organizational structures in which the employees play a central role (Cobbenhagen, 1999).

Today, we live in a knowledge-driven society (Huizinga et.al., 2004) in which organizations strive to be "learning organizations". Knowledge intensive organizations have educated employees who have the knowledge, skills and competences to perform complicated, highly sophisticated tasks. Moreover, work processes have become more complex and organizations have, therefore, switched to more flexible horizontal organizational structures where working activities are placed around the core processes, networks or projects. These new organizational structures are supposed to be highly adaptive to changes in competitive environments and technologies, be innovative and have cost-efficiency because fewer managers and employees are needed and the work can be done in multi-disciplinary teams or self-managing teams which facilitate knowledge sharing and learning and may result in higher product or service quality (Montebello, 1994, Mohrman et.al., 1995, Cummings & Worley, 2005). As not every group of people can be called a team it is important to explore the differences between these concepts.

### **3.1.2 Definition Team**

Many people use the terms "team" and "group" interchangeably and make no distinction between the two. However, Sheard & Kakabadse (2004) have studied the literature on teams and groups and pointed out that there is a difference between a "group" and a "team". A group can be described as two or more individuals that interact and who are independent and have come together to achieve a particular objective. The main reason why these individuals interact is to share information and to help each other within each individual's area of responsibility. There is no need or opportunity to engage in collective work that requires joint effort.

Sheard & Kakabadse (2004, p. 13) give a good working definition of a team which is:

"A team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable". Especially the words "complementary skills, common purpose and mutually accountable" are very important, for these words indicate the difference between a group and a team (Montebello, 1994).



This applies to any kind of team: permanent functional teams, project teams, cross-functional teams, virtual teams and self-managing work teams.

Mentioning these several types of teams indicates that teams can be categorized. A convenient way to categorize teams is on the basis of a number of characteristics that have an impact on how they are designed and managed, namely based on their purpose, duration, membership, and structure (Sheard & Kakabadse, 2004, Mohrman et.al., 1995).<sup>1</sup>

### 3.1.3 Categories of teams

Teams may vary in their **purpose**. For instance, a *work team* might be involved in the development of a product or to perform the core processes of the organization.

An *improvement team* might be involved in a reengineering effort in order to realize improvements in the organization's capability to deliver its products and services effectively by redesigning work (Mohrman et.al., 1995).

A *management team*, consisting of people from different functional or operating areas, are brought together to plan, implement and manage the ongoing organizational activities. Another purpose of a team might be solving problems.

*Problem solving teams*, typically consisting of five to twelve employees of the same department, have won popularity since team-based working was introduced in organizations. The members of these problem solving teams come together very regularly, for instance once a week, to discuss working processes and methods and to bring up ideas how these processes and methods could be improved (Sheard & Kakabadse, 2004).

A team's **duration** can vary too. A team can be considered as being *permanent* when it is designed to handle an ongoing flow of business through time such as functional department teams. A team can be considered as being *temporary* when it has been established for a short-term particular opportunity, such as for instance a proposal team or a task team. Project teams that handle the life cycle of a project that might take several months or even several years are also considered to be temporary (Mohrman et.al., 1995). Self-managing teams often have a permanent character.

Team **membership** can either be *functional* or *cross-functional*.

*Functional* teams are composed of a manager and his or her subordinates who are active in a particular department. The team members perform similar work and share similar expertise. Within such a

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<sup>1</sup> There are also other types of categorization possible.



functional team the authority, decision making, leadership and interactions are simple and clear (Cummings & Worley, 2005). However, in the late 1980s cross-functional teams won in popularity. A *cross-functional* team consists of a group of employees that represent different functions and expertise, and most of the time, are from the same hierarchical level (Sheard & Kakabadse, 2004).

However, the cross-functional team may also include employees from all levels of the organization (Mohrman et.al., 1995). The objective of the arrangement of cross-functional integration in a team is to facilitate essential information exchange, and to simplify coordination and co-operation.

Teams can be either *supervised* or *self-managing*.

We speak of a *supervised* team when it is supervised or directed by a manager who is responsible for guiding the team in setting goals, in performing the necessary work activities and in evaluating performance (Montebello, 1994), whereas *self-managing* teams do not have a direct manager.

*Self-managing* teams consist of members performing interrelated tasks. They are responsible for a complete product or service, or a major part of a larger production process (Cummings & Worley, 2005). The tasks are rotated among the team members and the team members are also responsible for monitoring the team's productivity and quality (Yeatts & Hyten, 1998).

*Self-managing work teams* can be distinguished from "ad hoc" teams and task forces as they are ongoing teams that operate over extended periods of time. Decision making processes and the multiple skills of the team members generate true interdependence. Autonomy and feedback allow responsibility to be held at the team level and provide the necessary input to allow the team to make appropriate adjustments to their efforts. As self-managing work teams operate in larger work organizations they do not have complete autonomy and must coordinate their efforts with other organizational units (Yeatts & Hyten, 1998, Cummings & Worley, 2005).

#### **3.1.4 Development of self-managing work teams**

A self-managing work team is a stable, multi skilled, multi functional group with the responsibility to manage itself and the particular tasks it performs. The team should be designed in such a way that it will be able to perform these tasks. Consequently, when designing an effective self-managing work team several elements will have to be taken into account, such as the size of the team, several skills that are needed to complete a whole task, the skills that are needed to perform and manage the work, sufficient (financial) information to enable the team to manage and perform the tasks, the team's goals, boundary control that involves the extent to which team members can operate autonomously (Pasmore & Mlot, 1994, Cummings & Worley, 2005). However, it takes some time for a team to



develop into a well performing self-managing team. The teams undergo several stages of development, namely: “forming”, “storming”, “norming”, “performing” and eventually “adjourning” (Montebello, 1994, Tuckman, 2001) as is shown in Figure 2 below. I will now elucidate these stages.

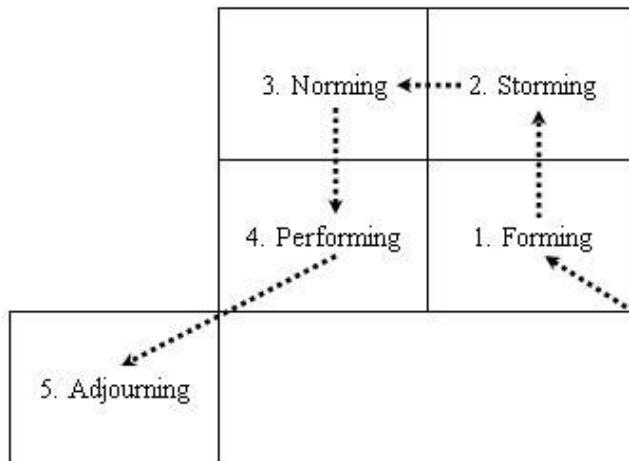


Figure 2  
Team development stages

### “Forming”

During the initial stage of the existence of the (self-managing) work teams the organization should see to it that the technical equipment and the rewards and information systems are aligned to the new working method and that the individual team members get the opportunity to acquire the skills and competences that are necessary to become fully participating team members (Pasmore & Mlot, 1994). In this initial period that is also indicated as the “forming” stage, the individual team members get acquainted with one another and with the expected team behaviour. The team members try to find out what each others’ abilities and attitudes are, they search for new norms and roles, and determine how and where they fit into the team. In this stage little is accomplished by the team as the team members are cautious and not accustomed to teamwork behaviour and many things are different from the situation they were used to (Tuckman, 2001).

### “Storming”

After a few months time in which the team members have worked hard to be pleasant and polite to each other the team members begin to compete for influence and control so that problems arise and team members argue a lot, relationships are strained as a consequence of jealousy and disunity. In this stage of team development that is also called: “storming” the team members tend not to work well as a



team either, but nevertheless things are done. In this stage team building activities might help to overcome the specific problems (Tuckman, 2001).

### **“Norming”**

After a period of time the team will reach the “norming” stage and overcome the competitive relationships in the team, accept each other and they will gradually become cooperative, close and mutually supportive and start working as a real team. In this stage the communication between team members will improve and will lead to a feeling of mutual trust so that a harmonious team relationship can develop (Tuckman, 2001). Feedback helps to prevent or correct misunderstandings (West et.al., 2003). Next to formal communication channels, informal communication will be used too which enables the individual team members to satisfy their need for social interaction and which are frequently faster and more efficient for identifying issues that the individual team members consider to be important (Sussman et.al., 2002).

### **“Performing”**

The next stage is called the “performing” stage. This is the stage in which the team can act autonomously, share power among the membership and turn into a high performing self-managing work team in which all team members cooperate and are involved in the teamwork to realize the team’s mission (Tuckman, 2001). In this stage good coordination is essential. When coordination is lacking the work will not be carried out well and will result in less effort spent directly on the main tasks (Yeatts & Hyten, 1998). However, even in this stage it should be realized that teamwork is a process that goes on continuously and should be developed by giving the team a mission that is clear, challenging and inspiring, by feedback and by team self-appraisal (Montebello, 1994, Yeatts & Hyten, 1998).

It should be noted that a (self-managing) team does not always proceed clearly from one stage to the next one. Sometimes, two stages may be going on simultaneously. It also occurs that a team occasionally regresses to a previous stage. However, this model can be considered as a general framework that reminds us that a (self-managing) team is a dynamic entity composed of individuals who all have their personal characteristics and who need some time to become a true team (Montebello, 1994). Furthermore, when teams have self-management the organization should see to it that the organizational climate will enable these self-managing work teams to continue to develop and to meet their goals (Pasmore & Mlot, 1994, Yeatts & Hyten, 1998).



### **“Adjourning”**

The final stage is “Adjourning”, which is also referred to as “Deforming and Mourning” (Tuckman, 2001). Adjourning is more of an adjunct to the original four stage model rather than an extension - it views the group from a perspective beyond the purpose of the first four stages. The “Adjourning” phase is certainly very relevant to the people in the team and their well-being, but not to the main task of managing and developing a team, which is clearly central to the original four stages. This last stage is the break-up of the team, hopefully when the task is completed successfully and its purpose fulfilled so that everyone can move on to new things, feeling good about what has been achieved. From an organizational perspective, recognition of and sensitivity to people's vulnerabilities in this last stage is helpful, particularly if the members of the (self-managing) team have been closely bonded and feel a sense of insecurity or threat from this change (Montebello, 1994, Tuckman, 2001).

The afore-mentioned categorization of teams and the stages of development of self-managing work teams provide an answer to the first sub-question (“What are self-managing teams?”).

In order to find an answer to the second sub-question (“What is satisfaction?”) attention will be given to employee satisfaction in the following section.

## **3.2 What is satisfaction?**

### **3.2.1 Satisfaction within teams (employee satisfaction)**

“Employee satisfaction is the degree to which employees have a positive affective orientation towards employment by the organization” (Price, 1997, p. 470).

In the literature, the concepts job satisfaction and employee satisfaction are used interchangeably as an orientation towards the employee's work and the organization (Currivan, 1999).

Various dimensions or facets of employee satisfaction are commonly distinguished such as work, supervision, pay, promotion, co-workers, autonomy, routinization, social support (peer and supervisor support), job stress (role ambiguity, role conflict and workload), interest in work, and job involvement (Price, 1997, Currivan, 1999).

On the basis of these dimensions organizations can survey their employees about their job related attitudes. Attitudes reflect how an individual feels about something, for an attitude is made up of cognition, affect and behaviour. Cognition refers to a person's beliefs, opinions, and knowledge. Affect refers to a person's emotion or feeling and behaviour refers to the way a person acts or conducts (Brief, 1998). In the 1960s attitude surveys were held because it was widely believed that



happy workers were productive workers. Nowadays organizations also value a good quality of work life for their employees. They try to offer the employees challenging work and opportunities for career development and they aim at creating a pleasant and safe work environment as they want to minimize the number of resignations and absences. For, losing a professional and critical employee will not only cost the organization a lot of money but also involves the loss of valuable tacit knowledge (Ramlall, 2004). By means of attitude surveys based on the afore-mentioned dimensions they can find out whether they succeed in achieving these goals.

By means of the afore-mentioned dimensions, organizations can examine the fit between what the environment has to offer and what a person needs. Much research and theory has been focussed on understanding employee attitudes, motivation and (overall/job) satisfaction. Several theories have been developed that specify the needs that should be fulfilled if employees are to be satisfied with their jobs.

For example, in 1969 Frederick Herzberg performed a study to determine which factors in an employee’s work environment caused satisfaction or dissatisfaction. He found that the employees described satisfying experiences as factors that were related to the content of the job itself and called these factors motivators. They include achievement, recognition, work itself, responsibility, advancement and growth. He found that dissatisfying experiences resulted from factors that were not related to the content of the job itself and called these factors hygiene factors. They include amongst others supervisory style, company policy, salary and the relation with the co-workers (Brief, 1998, Ramlall, 2004). These factors affecting job attitudes are shown in Table 1.

*Table 1*  
*Herzberg’s motivation-hygiene theory*

<b>Motivators</b>	<b>Hygiene factors</b>
<b>Satisfaction ----- No Satisfaction</b>	<b>No dissatisfaction ----- Dissatisfaction</b>
• achievement	• supervision
• recognition	• company policy
• work itself	• relationship with supervisor
• responsibility	• working conditions
• advancement	• salary
• growth	• relationship with peers
	• personal life
	• relationship with subordinates
	• status
	• security

Herzberg reasoned that because the factors causing satisfaction are different from those causing dissatisfaction, the two emotions can not simply be treated as opposites of one another. The opposite





of satisfaction is no satisfaction, rather than dissatisfaction, and the opposite of dissatisfaction is *no* dissatisfaction. To motivate people on their jobs Herzberg suggested emphasizing the factors that he had indicated as motivators as those factors that increase job satisfaction. These motivators also play an important role when working in self-managing work teams as the members of the team all have the responsibility to achieve the team's goals and they do not only get the recognition as a team but within the team there is also recognition of each member's unique value. By working in the self-managing team the members have the possibility to grow as because the individual members acquire new thinking and working skills and are involved in the decision making process. All these factors contribute to an improvement of the individual team members' (job) satisfaction (Manz & Neck, 1995).

Although Herzberg's theory has been criticized as being too simplistic, it is still very often referred to, to understand the causes of job satisfaction (Brief, 1998). During the last few decades much research has been conducted on job satisfaction and its antecedents too (Yeatts & Hyten, 1998, Brief, 1998). Brief (1998) states, after having reviewed many of these studies, that employee satisfaction is influenced directly by how people interpret their jobs and that those interpretations are influenced by both their personalities and the objective circumstances of their jobs. Furthermore he points out that job satisfaction is posited to be influenced directly by personality. He illustrated this in an integrative model of employee satisfaction that is shown in Figure 3 below (Brief, 1998).

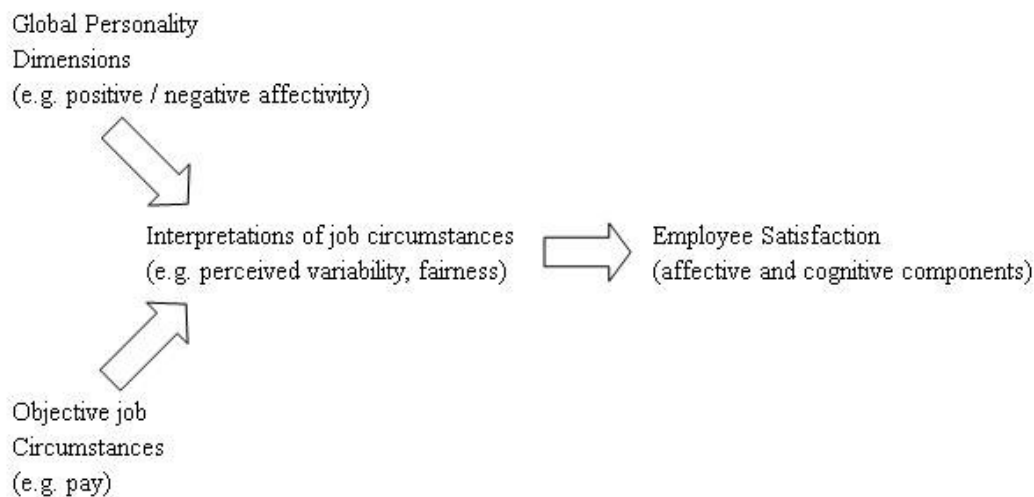


Figure 3  
Integrated model of employee satisfaction (Brief, 1998)

From above-mentioned passages it becomes clear that earlier research has shown that several factors such as the possibility to grow and the involvement in the decision-making process have an influence



on how employees interpret their jobs and perceive their working situation and have an impact on their feeling of being satisfied (Manz & Neck, 1995). Based on this information we expect that:

*Working in self-managing teams will have a positive impact on satisfaction within the team (hypothesis 1).*

### **3.2.2 Satisfaction outside teams**

Customer satisfaction can be defined as the expectations of customers concerning the quality of a product or service. It is the outcome of a complex information processing process, which essentially consists of a desired-actual comparison of a customer's experience with a purchased product or service and expectations with regard to the fitness of the product or service for its intended purpose. The customers' satisfaction level is of importance to organizations as it is related to other performances such as market-share and revenues, for the higher the customer satisfaction level is, the higher the market share value will be and the steadier the stream of future cash flow (Liao & Chiang, 2005).

By every organization customer value and satisfaction are recognized as key components of several business strategies. Three major management processes are essential to be able to satisfy the organization's customers namely: anticipating customer needs; quick response to customer orders; and new product development. A customer oriented focus can shift a competitive advantage based on cost factors to the organization's ability to innovate and to identify customer needs (Liao & Chiang, 2005). This can be realized by working in self-managing teams as these are often formed around a specific customer base or focus on a product or service and directly interact with suppliers and customers inside and outside the organization. This direct interaction with customers makes quick and accurate feedback possible and enables the self-managing teams to meet customer needs as they have the authority to make the necessary decisions themselves (Champoux, 2000). Customer satisfaction can also be enhanced by customer relationship marketing and customer service which tasks also need to be fulfilled by members of the self-managing work teams (Margerison & McCann, 1995). Research has shown that a critical factor for delivering quality to customers and consequently retaining customers' satisfaction for a (self-managing) team is to hold a customer-oriented view (Margerison & McCann, 1995).

Based on the afore-mentioned results of earlier research it may be postulated that direct interaction with customers enables the self-managing teams to meet customer needs (Champoux, 2000), reason why we expect that:



*Working in self-managing teams will have a positive impact on satisfaction outside the team (Hypothesis 2).*

In the afore-mentioned sections 3.2.1 and 3.2.2 the several aspects that lead to employee satisfaction (3.2.1) and customer satisfaction (3.2.2) have been elucidated, answering sub-question two (“What is satisfaction?”).

### **3.3 What is cohesiveness?**

*Cohesiveness* can be defined as “the attractiveness of the team to its members, together with their motivation to remain a member of the team” (Rollinson, 2002, p. 337). Teams are cohesive to the extent that membership in them is positively valued; members are drawn towards the team. In task oriented teams the concept can be differentiated into two sub concepts, task cohesiveness and social cohesiveness. Social cohesiveness refers to the bonds of interpersonal attraction that link team members. Task cohesiveness refers to the way in which skills and abilities of the team members blend to allow effective performance. Research has shown that task cohesion might change over time (Faria & Wellington, 1996). Task cohesiveness can be stimulated by three factors, namely: pressure from outside the team (such as high competition), successfully accomplishing a difficult task, and the eagerness to belong to a (specific) team (Wijsman, 1996).

High team cohesiveness within teams enhances the cooperation among the team members. However, high team cohesiveness might have a negative influence on the relationship between the several teams within an organization (Wijsman, 1996).

Cohesiveness is very important for organizations because cohesiveness has advantages to an organization, for a cohesive team usually has to achieve a high goal and if the team achieves that high goal, the positive feedback of its success will lead to member commitment and satisfaction which shows in the efforts team members invest in achieving the next team goal. This will enhance team cohesiveness (Hellriegel et.al., 1998).

Based on the afore-mentioned results, it might be expected that in the self-managing work teams the morale will be higher and, because the team members will have overcome most interpersonal problems, the members will be less anxious about work-related situations. Consequently cohesive teams show a lower level of absenteeism and quitting (Rollinson, 2002). Based on this information we expect that:

*Working in self-managing teams will have a positive impact on task cohesiveness (hypothesis 3).*



With the information given in this section an answer has been given to sub-question three (“What is cohesiveness?”). In order to find an answer to the fourth sub-question (“What is meant with “view on management”?”) attention will be given to this subject in the following section.

### **3.4 What is meant with “view on management”?**

View on management of employees involves social perception and using several senses of a person. We can get different signals which require that a conclusion has to be made about which one is correct. In social perception our senses are stimulated by another person or people. Not only do we perceive others, but we can also interact and be influenced by them. How a person experiences somebody else is often a function of how he or she experiences the person. Earlier research has shown that individuals who perceive a good relationship with their superior(s) are inclined to increase their work efforts. An individual’s perception also depends on the circumstances and on the mental and emotional characteristics, such as intelligence and personality, of those involved. Based on their perceptions individuals make judgements about others. In organizations, in most activities people are involved, which means that the interpretations of the employees’ perceptions may have a great impact on the effectiveness of organizational processes (Rollinson, 2002).

Key in the view on management is whether the employees’ perceptions match the specific leadership type that is required when in the organization work is based on self-managing work teams (Champoux, 2000). This specific type of leadership is explained in the following section as this is the basis on which the employees try to make an accurate assessment and express this in their view on management.

#### **3.4.1 Leadership**

Although a self-managing team is autonomous as far as its activities and decision making is concerned the team members do need to receive direction from higher levels in the organization. The teams report to a person who is held accountable for the team’s performance. Consequently, it can be said that self-managing work teams require a specific type of external leadership that comprises four functions namely *relating*, *scouting*, *persuading* and *empowering*, each of which functions requires specific behaviours as shown and explained in Figure 4 below (Druskat & Wheeler, 2004). Research has shown that these external leader’s behaviours are usually perceived as positive and enhance organization commitment, job satisfaction and self-esteem in a self-managing work team (Elloy, 2005).

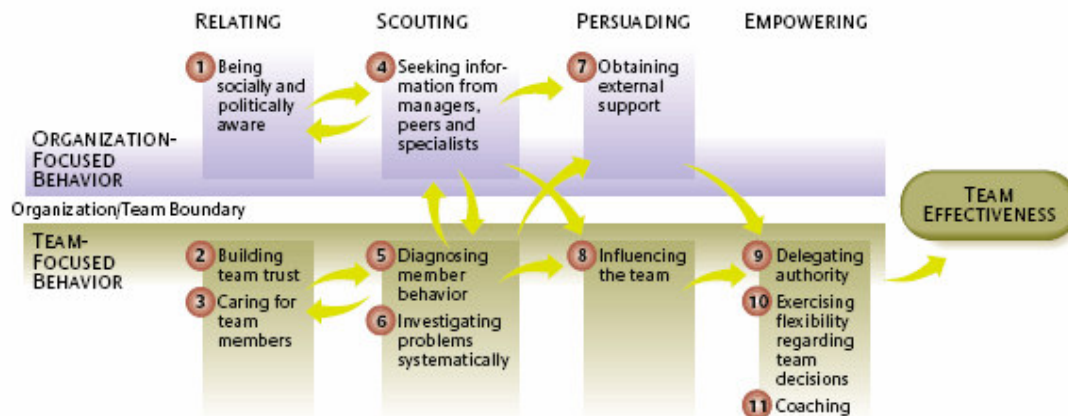


Figure 4  
Work of the external leader (Druskat & Wheeler, 2004)

Based on the information that self-managing work teams require a special type of leadership (Druskat & Wheeler, 2004), it is to be expected that when the employees perceive this specific leadership type their view on management will improve (Champoux, 2000). Consequently we expect that:

*Working in self-managing teams will have a positive impact on the view on the management (hypothesis 4).*

With the information given in sections 3.4 and 3.4.1 an answer has been given to sub-question four (“What is meant with “view on management”?”). In order to find an answer to the fifth sub-question (“What is employee involvement?”) more attention will be paid to employee involvement in section 3.5.

### 3.5 What is employee involvement?

Employee involvement refers to organization members’ participation in decisions that have an influence on organizational performance and on employees’ quality of work life. It can be explained on the basis of four elements, namely: *power* (e.g. the extent of authority that is granted to the employees to make work-related decisions); *information* (e.g. employees having at their disposal relevant information that is essential for effective decision-making); *knowledge and skills* (e.g. the knowledge and skills employees must have to be able to make the right decisions); and *rewards* (that can have a substantial influence on the extent of employee participation in the organization) (Cummings & Worley, 2005). In self-managing teams the level of employee involvement is high as the teams have the authority to make the necessary work decisions themselves, team members share knowledge with each other, and direct interaction with customers and other members of the



organization give them access to essential information. Moreover, they are rewarded by the recognition they get when having achieved their goal (Champoux, 2000, Rollinson, 2002).

It might be postulated that the extent of employee involvement is high in self-managing work teams as they are responsible for a complete product/service or a major part of a larger production process (Cummings & Worley, 2005). Based on these results the following hypothesis can be formulated:

*Working in self-managing teams will have a positive impact on employee involvement (hypothesis 5).*

The afore-mentioned theory has provided an answer to sub-question five (“What is employee involvement?”). In order to find an answer to the sixth sub-question (“What is confidence in the future?”) more attention will be given to confidence in the future in the following section.

### **3.6 What is confidence in the future?**

As we live in a volatile and uncertain world it is essential for organizations to succeed in giving the employees a sense of confidence about the future. Creating a vision of the future that will be experienced by the employees as comfortable and without threats, and showing them how they can participate in achieving this vision, will lead to a climate that is perceived as being highly supportive. It will help the organization to attract and retain the well-educated employees. The employees’ confidence in the future can also be enhanced when they experience consistency of their supervisors, when the communication is open, when mistakes are tolerated so long as they learn from them and when they perceive enthusiasm (Rollinson, 2002). Members of self-managing teams share knowledge and skills and are more aware of what is going on (being involved in the decision-making process). Consequently, members of self-managing teams may have more opportunities to grow and to have confidence in the future. When the team’s goal has been achieved, the team looks, with more confidence, forward to achieve the next goal (Hellriegel et.al., 1998).

The reasonable inference from the above information is that members of self-managing teams learn from each other, are involved in the decision-making process and are closely involved in and well informed about changes in working procedures and circumstances (Hellriegel, et.al., 1998)

Based on this information the following hypothesis is formulated:

*Working in self-managing teams will have a positive impact on the confidence in the future (hypothesis 6).*

In this section an answer has been given to sub-question six (“What is confidence in the future?”).



## **4 PROBLEM STATEMENT**

### **4.1 Purpose**

Some members of the employees' representative advisory council of the real estate management and engineering office of the Ministry of Defence section West would like to know whether the results of the survey concerning the effects of self-managing teams on positive work outcomes for the employees are in line with what can be found in the literature. In this context positive work outcomes refer to satisfaction, cohesiveness, the employees' view on management, employee involvement and their confidence in the future. This study is very important for the organization as the employees' social and work environment perceptions have an influence on their attitude and behaviour in the organization; which in turn may have an influence on their individual performance as well as on the teams' performance (Jones & James, 1979). The Ministry of Defence also wants to get more insight into the employees' image of the new working situation. As a consequence, this study aims to examine what the impact is of working in self-managing work teams on the positive outcomes for the employees. In the theory chapter of this thesis it has been described what was found in the literature about self-managing teams and about the indicators of the positive outcomes, namely: satisfaction, cohesiveness, the view on management, employee involvement and confidence in the future.

### **4.2 Conceptual model**

This study is based on two measurements of the same respondents (a 2-wave panel study). The first survey was conducted in 2001 when the self-managing work teams had not been implemented yet. In the course of 2002/2003 a reorganization took place and self-managing work teams were introduced. The second survey was held in 2004. From theory it has become clear that there are a lot of aspects that have an influence on working in self-managing work teams and its outcomes for employees. Figure 5 presents the conceptual model of this study.

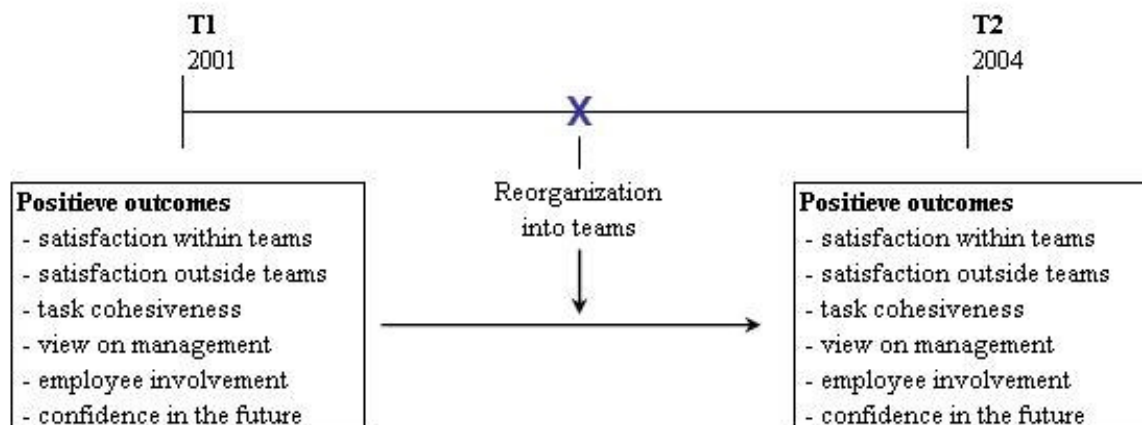


Figure 5  
Conceptual model

### 4.3 Goals

The results of this study can be used by the employees' representative advisory council to conclude whether the transition to working in self-managing work teams has been the right decision or whether other organizational measures should be implemented. Another aspect is that, after having been provided with this information, the members of the organization who are not familiar with the literature on working in self-managing work teams may come to other views and perspectives.

Earlier research has already shown evidence for the importance of the workers' perceptions of the social and work environment in a governmental, military organization at sea, in predicting outcomes such as employees' job satisfaction (Jones & James, 1979). As this study involves a military, governmental organization too, it might contribute to the knowledge about working in (self-managing) work teams in a military organization.

### 4.4 Hypotheses

The theoretical study and the resulting conceptual model have led to the hypotheses shown in Table 2.





Table 2

*Summary hypotheses*

hypothesis 1	Working in self-managing teams will have a positive impact on satisfaction within the team
hypothesis 2	Working in self-managing teams will have a positive impact on satisfaction outside the team
hypothesis 3	Working in self-managing teams will have a positive impact on task cohesiveness
hypothesis 4	Working in self-managing teams will have a positive impact on the view on the management
hypothesis 5	Working in self-managing teams will have a positive impact on employee involvement
hypothesis 6	Working in self-managing teams will have a positive impact on the confidence in the future



## 5 METHODOLOGY

In this chapter the employed research method will be discussed. In section 5.1 attention will be given to the organization and respondents. In sections 5.2, 5.3 and 5.4 the procedure, measures and descriptive analysis will be addressed.

### 5.1 Organization and respondents

Mid 1990s the Ministry of Defence and the employees' representative advisory council at the real estate management and engineering office of the Ministry of Defence decided to hold a survey among all employees (managers inclusive). Every three or four years the survey was held to get a greater insight into the employees' orientation towards their work and the organization.

#### 5.1.1 Population

The workforce consists of both military and civilian persons who are active as architects, designers, constructional engineers, technical experts, electricians, mechanics and all kinds of other technical experts as well as lawyers and administrative personnel (eighty percent are male). The age of the employees ranges from 20 to 62. Seventy percent of the workforce is in the age ranging from 35 to 62, whereas 30 percent of the workforce is in the age ranging from 20 to 35.

In the course of 2002/2003 the real estate management and engineering office of the Ministry of Defence was reorganized. This reorganization involved a reshuffling of persons and functions and a reallocation of tasks and self-managing work teams were introduced. These self-managing work teams are autonomous and self-monitoring. The lines of report of these teams have been indicated in the organization chart of the real estate management and engineering office of the Ministry of Defence section West shown in Figure 6 and in the organization charts included in the Appendix (I).

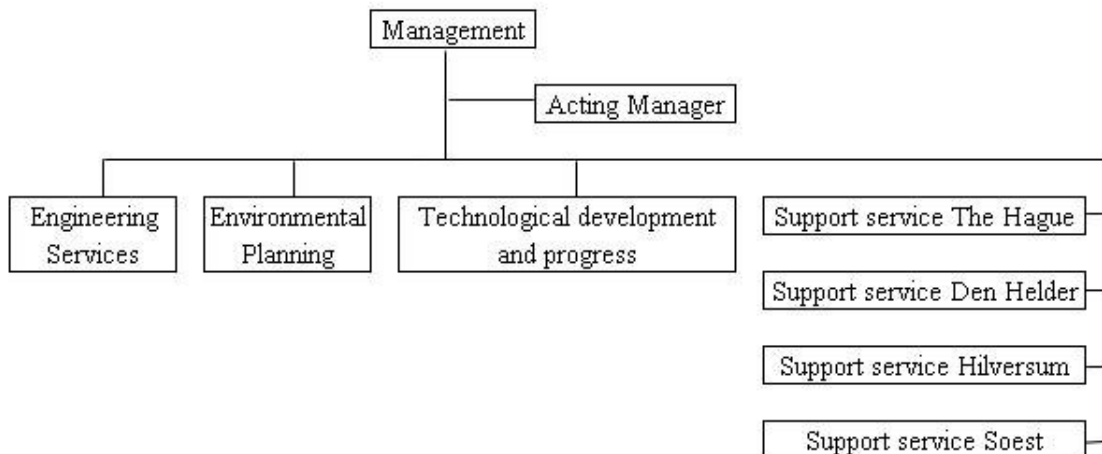


Figure 6  
 Organization chart of the real estate management and engineering office of the Ministry of Defence section West

The Management, the Acting Manager, as well as the Engineering Services, Environmental Planning, and the Technological development and progress services are situated in Utrecht. The *Acting Manager* works with eight self-managing work teams. The *Engineering services* consist of ten self-managing work teams. The *Technological development and progress service* consists of four self-managing teams and the *Environmental Planning service* consists of three self-managing work teams.

The Support services are located in The Hague, Den Helder, Hilversum, and Soest. Each *Support Service* has next to a Business Administration department two self-managing work teams.

In 2004, after one year of working in the self-managing work teams, another survey was held among all employees to find out whether the employees were satisfied with their new working situation and with working in self-managing work teams.

## 5.2 Procedure

In the 2001 survey 280 employees (managers inclusive; both military and civilian persons), who worked at the real estate management and engineering office of the Ministry of Defence section West completed the survey. During 2002/2003 the reorganization took place. In the 2004 survey all employees (managers inclusive) who worked at the governmental organization section West were again involved in the survey. The 2001 data for this study consisted of only 107 fully completed questionnaires which is a response rate of 38 percent. The 2004 data that were used for this thesis also consist of 107 fully completed questionnaires.

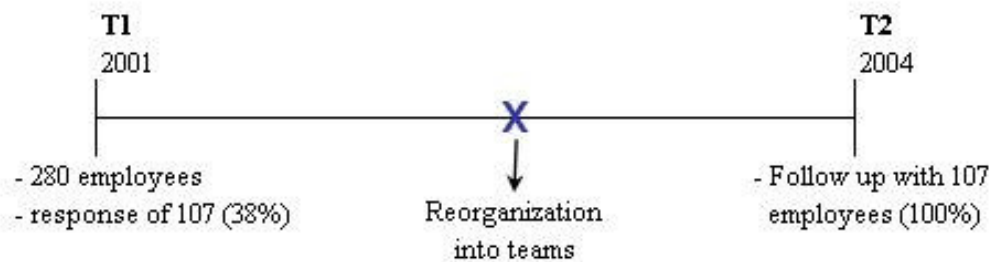


Figure 7  
Response and follow up

### 5.3 Measures

The questionnaire of the 2004 survey was the same as the one that was used in 2001. It had been drawn up by members of the Ministry of Defence in The Hague and consists of statements which were considered to be relevant by the composers (highly educated employees) of the questionnaire and by the Minister of Defence. The word “department” in 2001 was replaced by the word “team” in 2004. The employees were requested to fill in the questionnaire by means of indicating whether they agreed or disagreed with the statement. For this a Likert scale was used, ranging from “1” (totally disagree) to “10” (totally agree). The survey consisted of 37 questions, measuring seven scales. Three questions, have been left out because they were not relevant in the framework of this thesis. The remaining 34 questions (see Appendix II for questions) could be classified into the following scales:

- Satisfaction within the team (question 1 to 15) (15 items)
- Satisfaction outside the team (question 16 to 19) (4 items)
- Cohesion (question 20 to 23) (4 items)
- View on management (question 24 to 27) (4 items)
- Employee involvement (question 28 to 30) (3 items)
- Confidence in the future (questions 31 to 34) (4 items)

The questionnaire is included in the Appendix (II).

To find out whether the scales could be used for testing, a reliability test per scale was performed (see Table 3 below); the scale is acceptable when  $\alpha \geq 0,70$ . Table 3 shows that all reliability values are  $\geq 0,70$ .



Table 3

*Reliability analysis*

Scales	2001	2004
satisfaction within teams	.94	.96
satisfaction outside teams	.86	.84
task cohesiveness	.73	.79
view on management	.75	.85
employee involvement	.80	.84
confidence in the future	.76	.78

#### 5.4 Descriptive analysis

Table 4 presents the correlations between the scales, and Table 5 the means and standard deviations. Paired sampled T-tests were used to test hypotheses 1-6. Paired samples T-test can be used to compare the mean of a variable on two moments in time (before-after design) (De Vocht, 2001).



Table 4  
Correlations

	satisfaction within the team '01	satisfaction outside the team '01	task cohesiveness '01	view on management '01	employee involvement '01	confidence in the future '01	satisfaction within the team '04	satisfaction outside the team '04	task cohesiveness '04	view on management '04	employee involvement '04	confidence in the future '04
satisfaction within the team '01	1,0											
satisfaction outside the team '01	,77	1,0										
task cohesiveness '01	,69	,54	1,0									
view on management '01	,69	,57	,53	1,0								
employee involvement '01	,80	,77	,52	,72	1,0							
confidence in the future '01	,78	,69	,56	,74	,69	1,0						
satisfaction within the team '04	,05	,00	,05	,04	-,01	,00	1,0					
satisfaction outside the team '04	,10	,04	,09	,06	-,01	,05	,84	1,0				
task cohesiveness '04	,08	,07	,06	,08	,04	,06	,85	,70	1,0			
view on management '04	,10	,02	,12	,04	-,03	,06	,80	,79	,63	1,0		
employee involvement '04	,10	,06	,07	,06	,05	,12	,71	,76	,66	,69	1,0	
confidence in the future '04	,05	-,01	,02	-,01	-,04	-,01	,83	,83	,70	,83	,77	1,0

Table 4 shows the correlations of 2001 range from 0,52 to 0,80 (employee involvement). The correlations of 2004 range from 0,63 (view on management) to 0,85 (task cohesiveness). The measures of the cross-sectional correlations are high and the cross-lagged correlations are low. For these high and low correlation results we can give the following explanations:

- The questionnaire was designed in 2001 when the work was done in departments and self-managing teams had not been introduced. The same questionnaire was used in 2004 after self-managing teams had been introduced and the word department was replaced by the word team. This implies that the questionnaire was originally not meant to measure teams.
- When the factor-analysis with the 37 questions of the questionnaire is performed this results in seven scales. However when thereupon a factor-analysis with the 7 scales is performed it results in one scale, which is an indication that a predominant item is measured with this questionnaire. From this it becomes clear that the questionnaire was designed to measure one item, namely satisfaction, in spite of the fact that it can be divided into multiple scales.
- It might be argued that central tendency is involved, which implies that employees are reluctant to give extreme judgments with the consequence that the answers given are almost the same.



- When reorganization has taken place there are often factors (e.g. emotional) that can not be measured but do have an impact on the employees and the data.

Table 5 that is shown below represents the means and standard deviations.

Table 5

*Statistics scales*

	2001		2004	
	Mean	Std. Deviation	Mean	Std. Deviation
satisfaction within the team	6.54	.45	6.98	.54
satisfaction outside the team	6.08	.48	6.85	.52
task cohesiveness	6.56	.59	7.17	.64
view on management	5.96	.47	6.24	.49
employee involvement	5.85	.45	6.48	.51
confidence in the future	5.98	.43	6.56	.45

When comparing the means of 2004 (ranging from 6.24 to 7.17) with those of 2001 (ranging from 5.85 to 6.56) it becomes clear that all means have increased. The standard deviation indicates how far away from the mean the data values are. Table 5 shows that all standard deviations are low, ranging from 0.43 to 0.59 in 2001 and ranging from 0.45 to 0.64 in 2004, which indicates that the data values are close to the mean. This is in line with central tendency (employees are reluctant to give extreme judgments) that is a possible explanation for the correlations found.



## 6 RESULTS

### 6.1 Satisfaction within the team

The fifteen questions in this scale focus on mutual communication, (self-)leadership/management, team member/employee involvement and (self-)responsibility and have led to the hypothesis (1): *Working in self-managing teams will have a positive impact on satisfaction within the team*

Table 6

*Paired samples test satisfaction within the team*

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std. Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower	Upper			
satisfaction within the team '01	6.5364	-.4417	.67842	.06559	-.57177	-.31172	-6.735	106	.000
satisfaction within the team '04	6.9782								

Table 6 shows a significant increase in satisfaction within the teams from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on satisfaction within the team. For this reason hypothesis one is accepted.

### 6.2 Satisfaction outside the team

The four questions in this scale focus on customer orientation and have led to the hypothesis (2): *Working in self-managing teams will have a positive impact on satisfaction outside the team*

Table 7

*Paired samples test satisfaction outside the team*

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std. Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower	Upper			
satisfaction outside the team '01	6.0818	-.7664	.70650	.06830	-.90177	-.63094	-11.22	106	.000
satisfaction outside the team '04	6.8481								





Table 7 shows a significant increase in satisfaction outside the teams from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on satisfaction outside the team. For this reason hypothesis two is accepted.

### 6.3 Task cohesiveness

In the scale cohesion two questions related to social cohesiveness and two to task cohesiveness. The two questions about task cohesiveness focus on the cohesion with regard to performing the tasks, and have led to the hypothesis (3):

*Working in self-managing teams will have a positive impact on task cohesiveness*

Table 8

*Paired samples test task cohesiveness*

	Mean	Paired Differences				t	df	Sig. (2-tailed)	
		Mean Difference	Std Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower				Upper
task cohesiveness '01	6.5607	-.6121	.84761	.08194	-.77461	-.44969	-7.471	106	.000
task cohesiveness '04	7.1729								

Table 8 shows a significant increase in task cohesiveness from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on task cohesiveness. For this reason hypothesis three is accepted.

### 6.4 View on management

The four questions in this scale focus on whether the employees were satisfied with the performance of the special type of leadership that is required when working in self-managed teams and have led to the hypothesis (4):

*Working in self-managing teams will have a positive impact on the view on the management.*



Table 9

Paired samples test view on management

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower	Upper			
view on management '01	5.9556	-.2874	.67100	.06487	-.41599	-.15878	-4.430	106	.000
view on management '04	6.2430								

Table 9 shows a significant increase in the view on management from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on the view on management. For this reason hypothesis four is accepted.

### 6.5 Employee involvement

The three questions in this scale focus on the degree of participation in the four elements of employee involvement (power, information, knowledge and skills, rewards), and have led to the hypothesis (5):

*Working in self-managing teams will have a positive impact on employee involvement.*

Table 10

Paired samples test employee involvement

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower	Upper			
employee involvement '01	5.8536	-.6262	.66778	.06456	-.75416	-.49818	-9.699	106	.000
employee involvement '04	6.4798								

Table 10 shows a significant increase in employee involvement from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on employee involvement. For this reason hypothesis five is accepted.



### 6.6 Confidence in the future

The four questions in this scale focus on whether the employees have confidence in the future and have led to the hypothesis (6):

*Working in self-managing teams will have a positive impact on the confidence in the future.*

Table 11

*Paired samples test confidence in the future*

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std Deviation	Std. Error Mean	95% Confidence Interval of the difference				
					Lower	Upper			
confidence in the future '01	5.9766	-.5794	.63283	.06118	-7.0073	-.45815	-9.471	106	.000
confidence in the future '04	6.5561								

Table 11 shows a significant increase in confidence in the future from 2001 to 2004. As a consequence, these results indicate a positive impact of self-managing teamwork on confidence in the future. For this reason hypothesis six is accepted.



## 7 DISCUSSION AND CONCLUSION

### 7.1 Introduction

The aim of this thesis was to examine *the impact of self-managing teams on positive work outcomes for the employees at a governmental military organization*. In this context positive work outcomes refer to the (employees') satisfaction, cohesiveness, their view on management, employee involvement and their confidence in the future.

This study is based on a unique 2-wave panel study including a pre- and post test among 107 employees (response rate of 38 percent). The first survey was held in 2001 when self-managing work teams had not yet been introduced. During 2002/2003 the reorganization took place and self-managing work teams were introduced. The second survey was held in 2004. In the 2001 survey all 280 employees both military and civilian persons, who worked at the real estate management and engineering office of the Ministry of Defence section West completed the survey. In the 2004 survey all employees were again involved.

From the literature review presented in this thesis, we may conclude that teams undergo several stages of development (Montebello, 1994, Tuckman, 2001). When the 2004 survey was held the self-managing work teams were already in the norming respectively performing stage of development.

### 7.2 Hypothesis one

From the literature review it became clear that several factors contribute to an improvement of the individual team members' satisfaction which led to the hypothesis: working in self-managing teams will have a positive impact on satisfaction within the team. The results found suggested that working in self-managing teams may indeed have a positive impact on the satisfaction of the members of the teams, because in 2004 there was an improvement in employee satisfaction compared to the results of 2001 when the self-managing teams had not been introduced yet.

### 7.3 Hypothesis two

The second hypothesis was: working in self-managing teams will have a positive impact on satisfaction outside the team. The results of the test showed an improvement of the mean of 2004 of 0.8 compared to the mean of 2001. This improvement in satisfaction outside teams confirms the theoretical explanation that working in self-managing teams makes it possible to better meet the clients' needs and demands because a higher level of customer-orientation can be reached. In the



literature it is stated that direct interaction with the customers enables quick, accurate feedback and that customers' demands can be met due to the high level of control within teams.

As satisfaction within teams as well as satisfaction outside teams has improved after the introduction of self-managing work teams it might be expected that the coming years will show a further improvement because the longer the team exists the better the cooperation will be. Next to that achievement of the team's goals leads to it that the team members will give more energy to achieve the next team goal and every time the team's goal is reached the feeling of satisfaction is enhanced.

#### **7.4 Hypothesis three**

From the literature review it became clear that it might be expected that in self-managing work teams the morale will be higher, most interpersonal problems have been solved and team members experience work-related situations with less anxiety (Rollinson, 2002). This led to the hypothesis: working in self-managing teams will have a positive impact on task cohesiveness. As this is a military organization, where ranks play a role, the organizational culture is different from the culture you meet in a private organization. In general, task cohesiveness among military employees is supposed to be very high. However, in this organization also civilians are employed which might have an influence on the task cohesiveness. The results confirmed the literature where it is stated that working in self-managing work teams will result in a higher level of task cohesiveness as the team members are more interdependent and collectively feel responsible for the correct and successful fulfilment of the tasks undertaken. In 2001 the mean was 6.56. In 2004 the mean had increased to 7.17 which indicated an improvement in task cohesiveness.

#### **7.5 Hypothesis four**

As far as the view on management is concerned it is pointed out in the theoretical part of this thesis that self-managing work teams require a special type of leadership and when employees perceive this specific leadership type their view on management might improve (Champoux, 2000), which led to the hypothesis: working in self-managing teams will have a positive impact on the view on the management. Results found suggested that there is a significant increase in the view on management from 2001 to 2004. This might be an indication that self-managing teamwork has a positive impact on the view on management.



## 7.6 Hypothesis five

Based on the literature review we postulated that the extent of employee involvement is high in self-managing work teams as they are responsible for a complete product/service or a major part of a larger production process (Cummings & Worley, 2005), which led to the hypothesis: working in self-managing teams will have a positive impact on employee involvement. The results confirmed the literature as in 2001 the mean was 5.85 and in 2004 the mean had increased to 6.48 which indicated an improvement in employee involvement.

## 7.7 Hypothesis six

From literature we learned that the employees' confidence in the future may be enhanced when they are closely involved in and well informed about changes in working procedures and circumstances and experience their work situation as comfortable and without threats (Hellriegel et al., 1998, Rollinson, 2002). Based on this information the following hypothesis was formulated: working in self-managing teams will have a positive impact on the confidence in the future. Practice showed that this can be realized by working in self-managing work teams as the figures made clear that the employees now have more confidence in the future than they used to have, as there is a significant increase in the confidence in the future. This might be an indication that self-managing teamwork has a positive impact on confidence in the future.

In the preceding part all hypotheses have been reviewed. In general, it can be concluded that the results suggest positive effects of working within self-managing teams.

## 7.8 Limitations

However the results should be interpreted very carefully because of the fact that the questionnaire was designed in the period before the reorganization, when the self-managing teams had not been introduced yet. Consequently it is questionable whether the questionnaire was suitable for the 2004 survey.

It should be kept in mind that the questionnaire was mainly aimed at measuring satisfaction, which is confirmed when performing the factor-analysis with all questions of the questionnaire, as this results in seven scales, but when performing a factor-analysis with these seven scales it results in one scale.

Moreover it might be argued that central tendency is involved which implies that employees are reluctant to give extreme judgments with the consequence that the answers given are almost the same.

When a reorganization has taken place there are often factors (e.g. emotional) that can not be measured but do have an impact on the employees and the data.



The 2001 data for this study consisted of only 107 fully completed questionnaires which is a response rate of 38 percent. The 2004 data that were used for this thesis also consist of 107 fully completed questionnaires. Because of this response rate it should be wondered whether the results are a good representation of the entire organization.

As this is a military organization, where both military and civilian persons work and where ranks play a role, the organizational culture is different from the culture you meet in a private organization. Next to that 80 percent of the employees are male and 20 percent female.

### **7.9 Practical implications**

Based on this current research some suggestions for future research can be made. It might be interesting to use different variables such as absenteeism, employee turnover, age or rank. These can be related to satisfaction within teams. When employees are less satisfied this might have an influence on the level of absenteeism and employee turnover. These factors are important because both absenteeism and employee turnover influence team cohesiveness and team performance. Furthermore it might be interesting for this military organization to find out whether age or rank have an influence on working in self-managing work teams.

Social cohesiveness could not be measured in this study because the  $\alpha < 0.70$  and it would therefore be interesting to find out whether working in self-managing work teams has a positive influence on social cohesiveness.

Another suggestion is to hold a survey in which the same scales are used but, with a questionnaire that is especially designed for measuring self-managing work teams.

Furthermore it would be interesting to compare different kinds of teams to find out whether there is a difference in the level of satisfaction between teams (e.g. self-managing work teams and non self-managing work teams).

### **7.10 Conclusion**

Based on this study it may be concluded that working in self-managing work teams may indeed have positive effects for employees in this governmental military organization with regard to satisfaction, cohesiveness, view on management, employee involvement and confidence in the future. These results suggest that the introduction of self-managing work teams has been the right decision. It might be expected that in the coming years a further improvement may be realized, but a future survey with a more appropriate questionnaire is needed to confirm this.



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APPENDIX I ORGANIZATION CHARTS

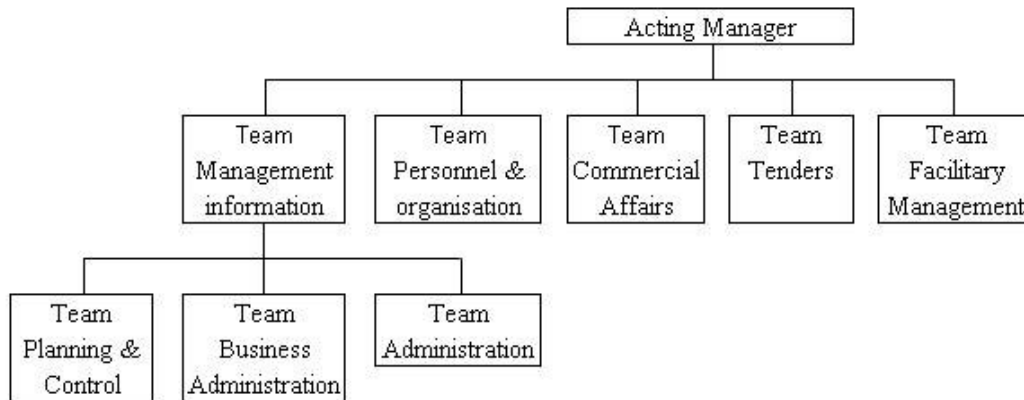


Figure 8  
Organization chart Acting Manager

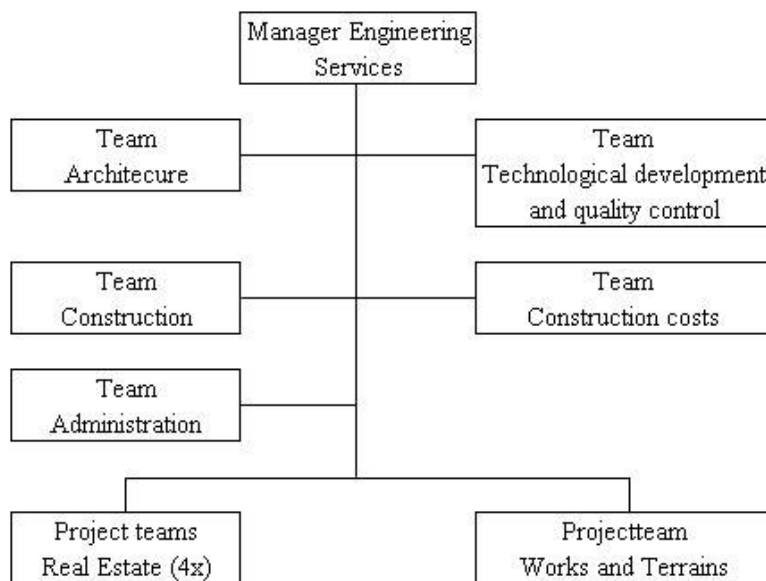


Figure 9  
Organization chart Manager Engineering Services

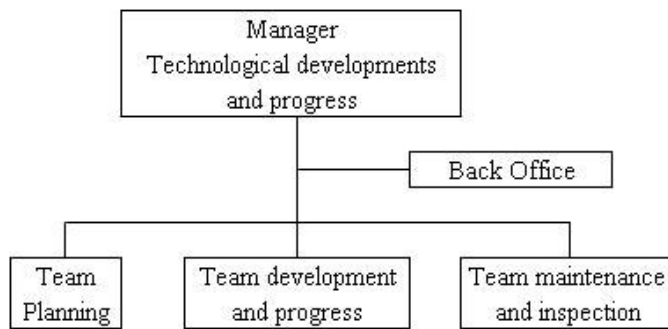


Figure 10  
Organization chart Manager Technological Developments and Progress

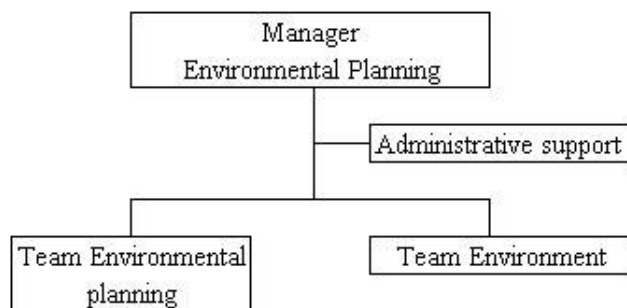


Figure 11  
Organization chart Manager Environmental Planning

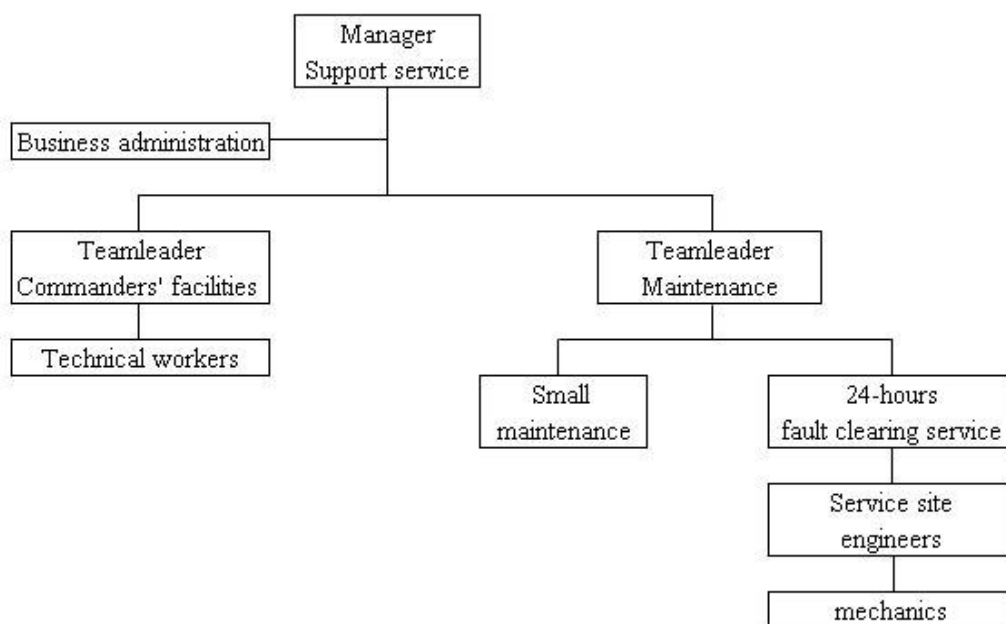


Figure 12  
Organization chart Manager Support Service



## APPENDIX II QUESTIONNAIRE

### Instructions

Please indicate your opinion by using the following scale where 1 is totally disagree and 10 is totally agree. At the bottom of the questionnaire you have the opportunity to comment or supplement your opinion about (one of) the statements.

Please indicate the section where you are employed

<input type="radio"/> Central section	<input type="radio"/> Section west
<input type="radio"/> Section internal services	<input type="radio"/> Section south
<input type="radio"/> Section north	<input type="radio"/> Germany

totally disagree totally agree  
 $\longleftarrow$  \longrightarrow

### *Satisfaction within the team*

	1	2	3	4	5	6	7	8	9	10
1. I know the goals of my department/team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I know the (periodical) results of the goals of my department/team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I get feedback about the way in which I do my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I notice that extra efforts within the department/team lead to extra recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I think that within our department/team people are called to account for sticking to agreements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am satisfied with the functioning of my direct superior	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I think that within my department/team the discussion about work progress is performed well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I think that within our department/team agreements are kept	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I know what is expected from me within the department/team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I think the authorities of my function are in balance with my responsibilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I think that within my department/team I function to my own satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



12. I am satisfied with my workplace	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

13. Sufficient means are put at my disposal to be able to do my work well	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

14. I think my work pressure is acceptable	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

15. I go to my work with pleasure	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**Satisfaction outside the team**

16. I think our department/team acts sufficiently client-directed to the units within the own section	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

17. I think our department/team acts sufficiently client-directed to units outside the real estate and engineering office or other branches of the military service	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

18. I think our management acts sufficiently client-directed to other branches of the real estate and engineering office	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

19. I think that our management acts sufficiently client-directed to the branch of military service	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**Cohesiveness**

20. I think there is an atmosphere of collegiality within our department/team	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

21. I think there is cohesiveness within our department/team	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

22. I think there is an atmosphere of collegiality within our section	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

23. I think there is cohesiveness within our section	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**View on management**

24. I know what our management wants to achieve this year	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

25. I think that within the management the willingness to change is large	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

26. I think that my management functions satisfactorily	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0



27. I know the (periodical) results of our management	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**Employee involvement**

28. I think that the employees' representative advisory council within my section functions satisfactorily	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

29. I think that the joint employees' representative advisory council functions satisfactorily	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

30. I think I can exercise influence on bringing about work agreements	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**Confidence in the future**

31. I have confidence in the future of the real estate and engineering office as a whole	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

32. I have confidence in my future within my own section	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

33. I think I have sufficient training opportunities	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

34. I have sufficient opportunities for development in my function	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**View on the governmental organisation**

35. I think that I get sufficient information from the leaders on the developments within the real estate and engineering office of the Ministry of Defence	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

36. I think my section functions satisfactorily	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

37. I know what the real estate and engineering office stands for	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

**Room for suggestions**

Name:

Suggestion:

.....

.....

.....

.....

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