

**Finding a right way to communicate**  
**Evaluation of communication practices in a multicultural project**

Master's Thesis

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# JYVÄSKYLÄN YLIOPISTO

Tiedekunta HUMANISTINEN	Laitos VIESTINTÄTIETEIDEN
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Työn nimi Finding a right way to communicate - Evaluation of communication practices in a multicultural project	
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Aika Syksy 2001	Sivumäärä 130 + 10
<p><b>Tiivistelmä - Abstract</b></p> <p>Tutkielma on tapaustutkimus monikulttuurisesta projektiorganisaatiosta. Tutkimuskohteensa oleva projekti on paperitehdasprojekti, jossa tilaajana on portugalilainen yritys ja pääkonsulttina suomalainen yritys. Projektiviestintä on monitasoista. Tyypillisesti projekteissa on kolme osapuolta, on asiakas tai tilaaja, konsultti ja toimittajat. Viestintää tapahtuu organisaatioiden sisäisesti, organisaatioiden välillä ja toisaalta yritysten välillä. Tutkimus keskittyy ensisijaisesti projektin työmaaorganisaatioon, joka on projektin kannalta keskeinen. Työmaaorganisaatioon kuuluu edustajia niin asiakkaan kuin konsultinkin puolelta. Kaiken kaikkiaan tutkimuksessa on mukana yhteensä 32 organisaatiota yhdeksästä eri maasta.</p> <p>Tutkimuksen päätavoite on arvioida projektin viestintäkäytäntöjen onnistuneisuutta. Viestintäkäytäntöjen onnistuneisuutta mitataan tutkimuksessa viestintätyytyväisyyden tasolla, viestintäkanavien toimivuudella ja viestinnän yleisen tehokkuuden kautta. Tavoitteena on myös tarkastella kuinka eri organisaatiot ja yksilöt kokivat projektin viestinnän. Tutkimuksen tulosten on tarkoitus toimia palautteena projektiorganisaation jäsenille viestinnän onnistuneisuudesta. Tutkimuksen olennainen lisäulottuvuus on tutkimuskohteena olevan organisaation monikulttuurisuus. Tavoitteena on analysoida myös sitä, minkälainen vaikutus monikulttuurisuudella on projektin viestintään.</p> <p>Tutkimuksessa käytettiin kahta metodia aineistonkeruussa. Tutkimuksen ensimmäisessä vaiheessa organisaation jäsenille lähetettiin kyselylomakkeet. Lopullinen vastaajamäärä on 56. Lomakeaineistoin alustavan analyysin jälkeen yhtätoista avainhenkilöä haastateltiin. Haastattelujen tarkoituksena oli saada tarkempaa ja syvällisempää tietoa projektin viestinnästä ja lisäksi selvittää joitakin aihepiirejä, joista oli jo saatu lomakkeilla alustavaa tietoa.</p> <p>Tutkimuksen tulokset jakautuvat seitsemään kategoriaan: viestintätyytyväisyys, tiedonkulun suurimmat puutteet, viestintäkanavien toimivuus, onnistuneet ja ei niin onnistuneet asiat viestinnässä, monikulttuurisuus ja päivittäinen viestintä. Tulokset osoittavat että kokonaisuudessaan projektin viestintä oli onnistunutta.</p>	
<p><b>Asiasanat</b>            projektiviestintä, kulttuurienväläinen viestintä, monikulttuurisuus, tapaustutkimus, viestintätyytyväisyys, organisaatioviestintä, viestintäkanavien toimivuus, tehokkuus, Suomi, Portugali</p>	
Säilytyspaikka	Jyväskylän yliopisto / Tourulan kirjasto
Muita tietoja	

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<p><b>Tiivistelmä - Abstract</b></p> <p>This research is a case study of a multicultural project organisation. The particular project is a paper mill project. The client is a Portuguese company and the main consultant Finnish. In a project communication takes place in multiple levels. Typically there are three parties involved: the client, the consultant and the suppliers. Communication takes place internally in project organisations, between the different organisations and between the different companies. The main focus of the study is on the site organisation of the project that is seen as the core group of the project, members of which belong to both the client and consultant organisations. All in all, 32 organisations from nine different countries are included in the research.</p> <p>The main objective of the research is to evaluate the successfulness of communication practices of the project. The successfulness of communication practices is operationalised in this particular case as the level of communication satisfaction, efficiency of communication channels in transmitting information and general effectiveness of communication. Additional objective is to see how the different organisations and individuals involved experienced the communication of the project. The results of the study should provide feedback about the successfulness of communication to the project organisation members. An important dimension to this research is the multiculturalism of the project. One objective of this research is to analyse the effect of multiculturalism on the communication practices.</p> <p>Two different methods were used to collect the data, in the first phase a questionnaire was sent to the project members. The final sample was 56. After the preliminary analysis eleven key informants were further interviewed in order to gain deeper knowledge of the communication practices in the project and to clarify some issues that had come up in the results of the questionnaires.</p> <p>The results are handled under seven titles: communication satisfaction, main shortcomings of communication flow, channels efficiency, successful and not so successful aspects of communication, multiculturalism, effectiveness and day-to-day communication. The results indicate that as a whole the communication of the project PM was successful.</p>	
<p><b>Asiasanat</b> project communication, intercultural communication, multiculturalism, case study, communication satisfaction, organisational communication, channels efficiency, effectiveness, Finland, Portugal</p>	
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## INTRODUCTION

Working in projects seems to be one of the major trends of today's business world. Work is conducted in projects within organisations and in a larger scale as common enterprises of several companies. Often projects are besides being multi-organisational also multicultural. Working in a project that has many organisations and cultures involved must be challenging and requires many skills from the people involved. Knowing your own area well just is not enough, one needs to be a competent, flexible communicator who tolerates stress and pressure, works well in a team and is motivated and committed to his/her work, company and to the successfulness of the project.

This thesis is a case study of a multicultural project organisation. The main objective of this thesis is to evaluate the successfulness of communication practices in a particular multicultural project. From here on this project will be called the project PM. PM is a commonly used abbreviation of *paper machine* in paper industry. The successfulness of communication practices in this particular case is operationalised as the level of communication satisfaction, efficiency of communication channels in transmitting information and general effectiveness of communication. Also, the results of this study should show how the different organisations and individuals involved experienced the communication of the project.

One of the main challenges of projects is the communication. When the time is limited and the work needs to be done, communication is a necessary tool that has to function one way or another. When the time is money, one must find a right way, an effective way to communicate so that the work may proceed. Communication of a project is like the glue that keeps it all together, ties the different parties and groups to the same goal. If the glue dissolves, the project will scatter and the organisation of work is in jeopardy.

The initiative for the study came from the main consultant of the project. When the project is finished, the organisations review the whole project. The main consultant was interested in giving also attention to communication especially apart from more technical, work-related feedback that was given about the project. Thus one of the objectives of the thesis is to provide feedback about the successfulness of communication to the project organisation members. Feedback about communication and especially suggestions for improvements are

necessary and valuable information considering the forthcoming projects of the organisations involved.

An important dimension to this research is the multiculturalism of the project. Many projects are multicultural as are organisations. Multiculturalism is a factor that has received much attention within organisational sciences and in studying human resources management. Intercultural communication is a well-studied subject within communication sciences. Multiculturalism and its effect on communication in the specific case of a project, in an atypical organisation in that sense, has not received much attention. In this research the multiculturalism of the project has been approached from various angles. The effect of multiculturalism is viewed through the study of effective communication in multicultural work groups, through management and cultural dimensions and through the concepts of self and identity. One of the objectives of this research is to analyse the effect of multiculturalism on the communication practices in the project PM.

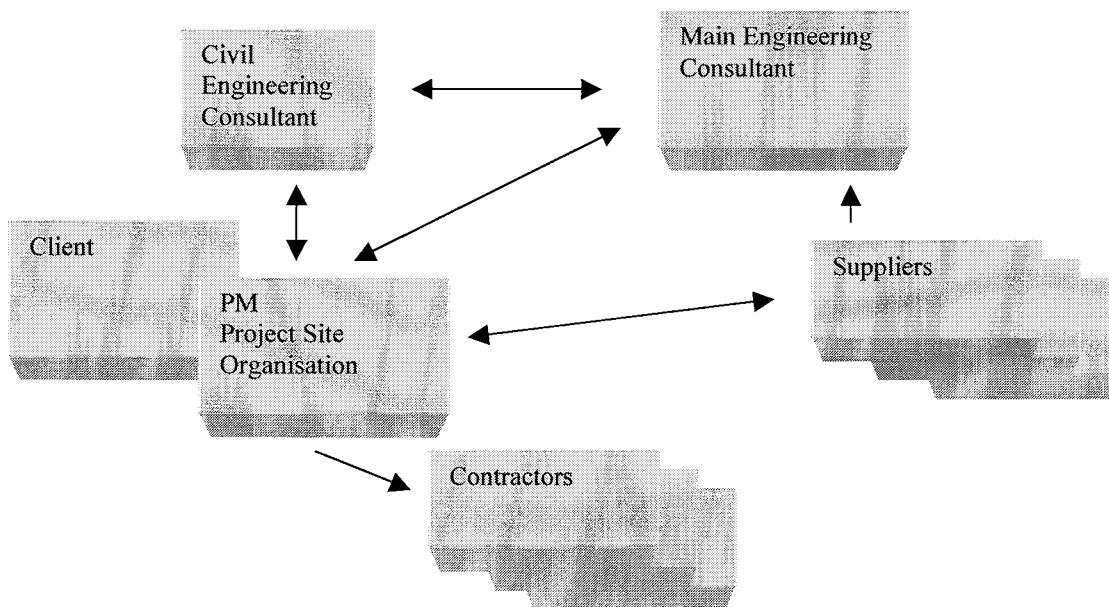
Projects are a big business and the companies want their money's worth. It is vital for projects to be effective in all the levels; delays are costly for all parties. So what is the measure of the successfulness of the project? At the end, what really matters is whether the project did fulfil the task it was assigned to. The rough definition of a successful project is a project that was completed within the given timeframe and within the budget. Effective communication and information flow are the key elements of project communication. If the communication goes smoothly, as it should, no attention is paid to it. And if it does not function, it is likely to impair the whole project.

In a project communication takes place in multiple levels. In the project PM, as in these kinds of projects typically, there are three parties involved: the client, the consultant and the suppliers. Communication takes place in different levels: internally in project organisations, between the different organisations and between the different companies. A project is always formed for a specific purpose, a paper mill in this case. A project organisation can be divided into disciplines, each of them contributing to their own area. PM was also a multicultural project, the companies of the client and the consultant came from different countries and among the suppliers there were at least nine different countries presented.

The main focus of the study is on the site organisation of the project that is seen as the core group of the project. The members of the core group of the site organisation belonged to both

client and consultant sides. Other levels of communication are also included in the research because the aim was also to offer an overall picture of the communication that took place in the project. The site organisation and its members, at least the core group of it, stayed there working together during the whole project. Thus this group or organisation was the part of project organisation that had to form itself and work together on daily basis. Thus the communication of this group is quite different from rest of the project communication. The figure 1 presents the basic structure of the project PM and the general directions of communication. The site organisation is, as shown by the figure, in central position in information distribution.

**Figure 1: The structure and lines of communication in project PM**



In the first phase of the study questionnaires were sent to 139 project members representing all the parties involved. The final sample was 56. After the preliminary analysis of the returned questionnaires, 11 people were further interviewed in order to gain deeper knowledge of the communication practices in the project and to clarify some issues that had come up in the results of the questionnaires. The interviewees were all in key positions in the project, thus having most knowledge over the issues of the project. Among the interviewees there were representatives of the client, consultants and the main supplier.

Because of the methodology the perspective of the study is the one of the respondents. No objective observation was done so the evaluation of the successfulness of the communication



is based on the perceptions and opinions of the respondents. The respondents are the experts because most of them have vast experience in multicultural projects and thus their insights describe the situation best. The researcher can only draw her own conclusions on the basis of the information she gains. The initiative for the research came from the main engineering consultant but the study was not conducted for that organisation.

In this research communication should be understood in a broad sense, as everything that happens between people and organisations within the context of the project. This definition of communication describes the approach of this research to the subject. In addition, an important dimension of this research is that the communication is not only viewed as an activity, as a series of happenings within the given context but what is also included is the evaluations of the individuals of that communication. The people and the organisations are both important factors. It is not the organisations that communicate with each other as is the case with cultures as well, but individuals. Still organisation and culture both do affect the communication.

Project organisations are distinctive organisations with limited structural life spans. Communication is a vital part of the life of any organisation, but it can be argued that in project work, its importance is even more emphasised. In this project in particular, highly specialised experts are put to together to accomplish a common goal, a paper mill. The nature of the job is mainly problem solving. No decisions can be done individually, without consulting the others first.

This thesis is divided to two parts. The part one discusses literature and research in relation to the operationalisation of communication successfulness in this particular case. Because of the vast amount of literature the topic areas are related to some defining decisions had to be made. The related literature and research is viewed through three approaches or perspectives: satisfaction, organisational and intercultural. Some areas are discussed in more detail. For example, communication satisfaction is one of the most important and thus emphasised theoretical concepts of this thesis. “The outcomes or influences of communication may be seen as a success of the organisation or the individual experiences of job, organisation and circumstances in general. Communication satisfaction is dependent both on the expectations of individuals and of the organisation itself – its success and investments for communication.” (Juholin 1999, 59.)

## **PART I: THE CONCEPTUAL BASIS OF THE STUDY**

### **1. SATISFACTION AS AN INDICATOR OF SUCCESSFUL COMMUNICATION IN A PROJECT – COMMUNICATION SATISFACTION**

*Communication satisfaction* is a multidimensional construct, which was developed from a series of factor analytic studies of perceptions of different forms of communication. According to Hecht (1978, 47) the study of communication satisfaction is of vital importance to the field of speech communication. The study of communication satisfaction is important because it examines the outcomes of communication behaviour. The outcomes provide the basis for a holistic theoretical approach to the speech communication. The concept of communication satisfaction has also a practical value because it enables the researcher to apply communication theory and research to the pursuit of making everyday interaction more fulfilling. (Hecht 1978, 47.)

In this study the concept of communication satisfaction is used as an indicator of the successfulness of communication. The concept is used as a starting point of the study, as one dimension of the overall successfulness of the communication of the project. The level of satisfaction the project organisation members have towards the communication of the project indicates the level of successfulness. If the respondents are unsatisfied with the communication, the communication has not been successful and vice versa.

#### **1.1. Conceptual framework of communication satisfaction**

Different paradigms have varying theories for explaining the phenomenon of satisfaction. Each of them concludes that: "...an affect becomes associated with or conditioned to the link between the environment and an internal state." The *hedonistic* perspective assumes that people seek only pleasure and avoid all things painful. When successful in this search and/or avoidance, a feeling of satisfaction is gained. From the *cognitivist* point of view perception links the past with present behaviours and thus creates expectations and anticipations. The expectations are construed to be either validated or invalidated. A validation of an expectation creates a satisfying affect. According to the *exchange* paradigm we create internally various comparison levels of alternatives and then we compare them with external rewards and costs. When we come up with a favourable result from these comparisons, we are satisfied. The *Skinnerian behaviourist* paradigm supposes that one's personal history of reinforcement and

discriminative stimuli provides the link between the past and the behaviour. Reinforcement of the behaviours is associated with a feeling of satisfaction. (Hecht 1978, 47 – 48.)

The more defined form of satisfaction, the communication satisfaction has been conceptualised in various ways. According to the theory of *need gratification* communication is perceived to have the function of fulfilling needs. Another approach to communication satisfaction is the theory of *expectation fulfilment*. Within this theoretical framework, communication satisfaction is perceived as tied to the expectations for oneself, other, relationship and context. According to *equivocality reduction* approach communication is satisfying to the degree to which it removes uncertainty. In other words, satisfaction is associated to the removal of equivocality and thus with increased knowledge or control, accurate predictions, understandings and success. According to the *constraint-reinforcement* perspective communication behaviours that produce satisfaction are encouraged and are likely to become more frequent. Communication is, however, limited by a range of constraints that are, depending on the source, classified as informational, environmental, personal or social. In addition, the theory also assumes that too much reinforcement results as dissatisfaction. For example, a very exuberant welcome may cause embarrassment. Overall satisfaction results from the difference between the amount of satisfaction and dissatisfaction. (Hecht 1978, 49 – 53.)

These previous conceptualisations of communication satisfaction do not provide sufficient explanation or conceptual clarity (Taylor 1997, 296). According to Hecht (1978, 54) the above mentioned theories have problems in linking between the internal state and the environment. Either they are too hypothetical in describing the variables to establish any clear definition of communication satisfaction or they assume a certain conceptualisations apply to everyone in all situations. In short, the approaches are only applicable to a limited range of conditions. As a result Hecht created a new version of the expectation fulfilment approach since he felt this theory came closest to providing a complete conceptualisation of communication satisfaction. (Hecht 1978, 54 – 57.)

Hecht's *discriminative fulfilment* approach views communication satisfaction as an internal, secondary reinforcer that arises from the generalisation of environmental reinforcement of behaviours that are manifested in response to the presence of a discriminative stimulus. According to Hecht people develop standards by which they judge their world. These standards represent learning from one's past and are thus equivalent to one's history of

reinforcement with regard to the satisfaction response. Satisfaction is seen as a type of response to the environment. The most repeated and important experiences and the outcomes from these experiences form one's "expectation level". Satisfaction is the result of encountering the world as one has been conditioned to expect. A positive expectation standard can also be a cognitive construct that has been developed in order to control and structure one's personal world. (Hecht 1978, 59 – 60.)

Discriminative fulfilment approach was originally formed to explain satisfaction in interpersonal interactions. Since, it has been used as a theoretical foundation for explaining communication satisfaction in organisations. In addition, Taylor's (1997) study proposed that the theory could also be used to explain other forms of organisational satisfaction besides communication satisfaction. (Taylor 1997, 296 – 297.)

## **1.2. Definitions and dimensions of communication satisfaction**

Communication satisfaction is essentially an affective element of the communicative interaction and is itself an important outcome in many communicative contexts (Grant, King & Behnke 1994, 101). Communication satisfaction has also been conceptualised as individual's feelings about interaction (Onyekwere, Rubin & Infante 1991, 41). In other words, communication satisfaction is understood as the individual's subjective perception and evaluation of the interaction. As communication satisfaction is also an outcome of interaction, it is likely to influence future communication the person has affecting the levels of motivation and interest.

Wiio created in 1978 organisational communication development model, OCD. According to Wiio (1978, 58) communication satisfaction has four dimensions:

1. Job satisfaction
2. Message content
3. Improvements in communication
4. Channels efficiency.

Downs (1979, 368 – 369) distinguished eight dimensions from communication satisfaction:

1. *Communication climate* (general satisfaction with the communication environment on organisational and personal level)

2. *Supervisor communication* or *Relationship to superiors* (the relationship with the immediate supervisor, e.g. how open the supervisor is to ideas and listening to problems)
3. *Organisational integration* (how much information that is relevant to their jobs do the individuals receive)
4. *Media quality* (e.g. how well meetings are organised, how clear are written communications)
5. *Horizontal communication* and/ or *Informal communication* (e.g. perceptions of grapevine, how accurate and free flowing is the informal communication)
6. *Organisational perspective* (the information that is given about the organisation as a whole)
7. *Subordinate communication* or *Relationship with subordinates* (how the supervisors perceive their subordinates and their communication)
8. *Personal feedback* (what individual knows about how his or her performance is being judged)

Since the original classification these dimensions have been presented in other order but the content and number of dimensions remaining the same (see e.g. Downs 1988, 113 – 114; Downs 1994, 114 – 115; Pincus 1986, 399).

Pincus (1986, 402) added a ninth dimension to communication satisfaction, *satisfaction with top management*. This dimension is focused on the employees' perceptions of the top management and their communication practices. In addition, Pincus grouped these nine dimensions into three categories:

1. *Informational dimensions*. These dimensions focus on the satisfaction with the content and flow of information throughout the organisation. The dimensions included are: Media quality (the formal communications channels), Organisational perspective (organisation-wide information, e.g. formal policies) and Organisational integration (job-related information).
2. *Relational dimensions*. These dimensions focus on the satisfaction with the communication relationships with other members of the organisation. The dimensions included are: Subordinate communication (communication from subordinates to supervisors), Horizontal communication (informal communication) and Top management Communication (two-way communication between the executives and other organisational members).
3. *Informational/relational dimensions*. These dimensions focus on both informational and relational aspects of communication. The dimensions included are: Supervisor

communication (e.g. the receptivity to subordinate problems, guidance to solving problems about work), Personal feedback (e.g. recognition, information about how one's performance is judged) and Communication climate (e.g. identification with the organisation, timeliness of information).

(Pincus 1986, 402.)

According to Pincus (1986, 403) the relational dimensions and the informational/ relational dimensions of communication satisfaction have a strong positive correlation with job satisfaction. The informational/ relational dimensions and the informational dimensions of communication satisfaction have a strong positive correlation with job performance. Findings of Pincus's study (1986, 412) suggest that the relative strength of the relationship between the informational/ relational dimensions of communication satisfaction and job satisfaction may exhibit similar patterns across organisations. Still, Pincus states that the congruence of communication satisfaction and job satisfaction patterns within a certain profession or industry is more likely.

### **1.3. Some research findings in communication satisfaction**

Pincus (1986) studied the communication satisfaction, job satisfaction and job performance of 327 professional nurses on the East Coast of the United States. He concluded that employees' perceptions of organisational communication are directly related to both their job satisfaction and job performance. He also found out that certain aspects of organisational communication that have both informational and relational functions were the major contributors to the communication-job satisfaction and communication-job performance relationships. These aspects of organisational communication were supervisor communication, communication climate and personal feedback. This finding also confirmed the results of previous studies. Pincus's results also proved that employee-immediate supervisor communication is very important on employee job satisfaction. Also the perceptions of top management communication were found to be related to employee job satisfaction and job performance. The study also gave further support to previous findings that perceptions of communication are positively and significantly linked with job satisfaction. (Pincus 1986, 413 – 414.)

Taylor (1997) studied communication satisfaction among the members of Southern Baptist churches. To measure the satisfaction Taylor tested Pincus' hypotheses. The findings of the study indicated that there was a strong relationship between communication satisfaction and

membership satisfaction. According to Taylor the results suggest that an environment of open, supportive, active, accurate and free-flowing communication forms the basis for satisfied membership in the context of church. Taylor's research the relational and informational/ relational dimensions of communication satisfaction were more positively related to membership satisfaction compared to the informational communication satisfaction. This finding confirmed the results of Pincus (1986). Taylor also concluded that in the best predictors of the church membership satisfaction level were the communication environment, communication with ministers, media quality, communication with leaders and teacher/ leader communication dimensions. (Taylor 1997, 302 – 303.)

Downs (1990) conducted a study about predictors of communication satisfaction during performance appraisal interviews with 83 staff members of a mid-western university in United States. He concluded that the perceived quality of communication and understanding were significant predictors of communication satisfaction. Downs' results also supported previous studies that had indicated that superior's perceived communication behaviours can either enhance or reduce a subordinate's level of satisfaction with his or her supervisor. Downs suggest, based on the results of his study that employees value interacting with a supervisor who tries to understand their point of view and also has well-developed communication skills. (Downs 1990, 348.)

Grant, King and Behnke (1994) examined the effects of persuasive message strategies on communication satisfaction and willingness to comply with persuasive requests on American university students. They found out that there is a strong relationship between communication satisfaction and willingness to comply (WTC). This finding is relevant for organisational communication because employee communication may be strongly related to satisfaction with specific message strategies used by the management. (Grant et al. 1994, 106.)

Onyekwere, Rubin and Infante (1991) studied interpersonal perceptions of communication competence and satisfaction in interpersonal situations. Interpersonal perception was conceptualised in the study as a combination of source credibility, interaction involvement, communication competence and communication satisfaction. They found out that communication satisfaction is related to communication appropriateness and effectiveness and thus to communication competence. Communication competence was conceptualised as a combination of appropriateness and effectiveness. (Onyekwere et al. 1991, 38, 41, 44.)

According to Juholin's (1999, 137) findings improvement in material facilities does not affect communication satisfaction and neither does the formal or professional communication. The communication system of an organisation is a kind of institution and the indirect, formal channels are heavily used. Still, they do not seem to have much to do with communication satisfaction that is, basically, appreciation of communication. (Juholin 1999, 137.)

#### **1.4. Communication satisfaction and job satisfaction**

The general assumption in the organisational literature is that positively perceived communication climate will substantially contribute to the organisational effectiveness. The pure number of the studies conducted suggests that positively perceived communication tends to result in job satisfaction. The variables that, once perceived positively, result in job satisfaction are according to Pincus and Rayfield (1989, 192) *supervisor-subordinate relationships, leadership behaviour, information flow and role perceptions*. In addition, when the communication climate was perceived as open, credible and subordinate-centred, the employee was likely to be satisfied. So one starting point in understanding the connection between communication satisfaction and job satisfaction is the subordinate's view of the superior-subordinate relationship. (Juholin 1999, 51.)

Communication satisfaction is often studied together with job satisfaction in organisational settings (see e.g. Juholin 1999; Pincus 1986). Also other more particular conceptualisations of satisfaction, such as subordinate satisfaction, have been linked with job satisfaction (see e.g. Infante & Gorden 1985; Infante, Anderson, Herington & Kim 1993; Richmond, McCroskey & Davis 1982; Richmond, McCroskey & Davis 1986). What is common to all of these forms of satisfaction that they are somewhat based on the communication satisfaction or at least they are based, to a great extent, to communication. For example, the results of some studies have suggested that employee's perceptions of top management and their communication activities influence employee's job satisfaction and job performance (Pincus 1986, 397).

Job satisfaction is most typically defined as an individual's perceptual/ emotional reaction to important facets of work. Job satisfaction is also commonly associated with job attitudes and morale. Job satisfaction is as communication satisfaction a multidimensional construct having to do for example with supervision, work, pay, promotion and co-workers. Job performance is a related concept to job satisfaction and to communication. Studies have shown, for example,



that internal managerial communication and supervisor communication contributes to organisational effectiveness. (Pincus 1986, 396 – 398.)

Research on communication and satisfaction has indicated that communicative relationships predict meaningful variance in employee satisfaction across a wide range of organisations. According to Richmond, McCroskey and Davis (1982, 171) it is likely since people have different personalities they will impact their work environment, meaning their superiors and colleagues, in ways that can alter their own level of satisfaction. Even when the organisational setting remains constant, employees with different personalities will respond differently to the same stimuli. Three of these individual differences that are related to communication have been isolated as variables that have been found to predict meaningful variance in an organisational setting. They are *innovativeness*, *communication apprehension* and *tolerance for disagreement*. (Richmond et al. 1982, 171.)

The communicative relationship between superior and subordinate affects the level of satisfaction of both. Communication in the organisation is the vehicle that disseminates information, instructions and affect. Richmond et al. (1982) studied the relationship of management communication style and employee satisfaction. Their results indicated strongly that the relationship of management communication style and satisfaction with supervision can be generalised across organisational contexts. Once management communication style becomes more employee-centred the satisfaction with the supervision increases. Richmond et al. also concluded that there was a significant relation between employees' perceptions of their immediate supervisors' management communication style and that of the upper management. Still, the immediate supervisor's management communication style was more associated with satisfaction with supervision and work. (Richmond et al. 1982, 173, 186.)

The findings in the employee satisfaction literature generally show a positive relationship between satisfaction and productivity. The relationship is not always statistically significant, but still, always when there is a notable relationship, it is a positive one. Even though there is no universally established relationship between employee satisfaction and productivity, it is evident that there is a link between employee satisfaction or dissatisfaction and organisational outcomes. (Richmond, McCroskey & Davis 1986, 179.)

## **1.5. Communication satisfaction and culture**

Stewart, Gudykunst, Ting-Toomey and Nishida (1986) studied decision-making styles in Japanese organisations and concluded among other things that when managers' behaviours corresponded with employees' preferred decision-making styles, employees perceived that managers exhibited more openness in interaction. Also, the employees were more satisfied with their organisations, their supervisors and their relationships with top management when managers' decision-making styles were similar with the styles the employees preferred. The employees were most satisfied when their expectations for decision-making styles were not violated. (Stewart et al. 1986, 248 – 249.) In this case satisfaction was a result when the expectations were fulfilled. Communication satisfaction surely is a universal phenomenon but as it is a subjective concept, the criteria for satisfaction must vary across cultures.

The conceptual basis of satisfaction and communication satisfaction is based on the assumption that the concepts are universal and applicable to all mankind. Most of the research that has applied the concept of communication satisfaction has been conducted in U.S. by North-Americans, so the dimensions and criteria of communication satisfaction presented in literature must be biased to some extent. The Americanisation or westernisation of communication theories is inevitable as long as the control and the centre of the research is located in the western world. How well do these theories apply to other cultures, to non-western, non-American cultures? Even the differences in the western world are great, North-Americans and Europeans do view things from different perspectives and have varying values about a lot of things. Business cultures are different, communication styles are different, the concept of time and effectiveness are different. Even Europe is not exactly homogeneous culturally. So why would all these individuals with different cultural backgrounds be satisfied or not satisfied to communication on the same basis? If the values are different, would they not also be reflected in such a subjective and affective concept as communication satisfaction?

### **Summary**

Communication satisfaction is a multidimensional construct that is itself an important outcome of communication. In this thesis communication satisfaction is one of the explaining factors when the successfulness of communication is measured. In the research the respondents are the true experts of project work and thus of project communication so their

satisfaction with the communication of the project and its different sides should give some indication of the overall successfulness of the communication.

Communication satisfaction has been explained by various theories like for example *need gratification*, *expectation fulfilment*, *equivocality reduction*, *constraint-reinforcement* and *discriminative fulfilment* theories. Communication satisfaction has nine dimensions that have been grouped to three categories: informational, relational and informational-relational dimensions. Communication satisfaction is related to the concept of job satisfaction. Some dimensions of communication satisfaction are correlated to job satisfaction and some to job performance. Communication satisfaction is often studied in organisational context together with job satisfaction. Most of the studies of communication satisfaction are American and even though the concept is likely to exist universally, its criteria might differ between cultures.

## **2. EFFECTIVE COMMUNICATION IN AN PROJECT ORGANISATION – REVIEWING ORGANISATIONAL COMMUNICATION LITERATURE**

In the previous chapter the concept of communication satisfaction was introduced and discussed. It was stated that the concept is used as a starting point of the evaluation of successfulness of communication in this particular project PM that is under study. The other conceptualisation of successfulness in this case is effectiveness. In this chapter 2 first some concepts of organisational communication that are relevant to this research are introduced. Afterwards, organisational effectiveness and group effectiveness are discussed in more detail. In the project PM the work is mainly carried out in groups or in teams and the whole organisation, specifically the site organisation is viewed as one team working for the common goals. As the focus of the study is a project organisation, the specific features of communication in a context of project organisation are also given attention to. The efficiency of communication channels is one of the indicators of effectiveness of communication and successfulness in the study. Communication channels are discussed in more detail in the last part of the chapter.

### **2.1. Conceptual framework of organisational communication**

Organisational life is an important characteristic of human experience. Human beings are not only social creatures but also organisational creatures. In our world most of our activities depend on organisations: business, industrial, governmental, educational, professional, religious, social or political organisations. (Daniels, Spiker & Papa 1997, 2.)

The primary goal of any organisation is to maintain its existence. The basis for work-organisation's existence is the ability to interpret the environment and evaluate whether the assumptions made regarding the environment are accurate. In order to adapt to the changes that take place in the environment an organisation needs to find adequate information, transfer the information to correct places within an organisation, make the necessary changes to strategy, objectives and means. In addition an organisation has to be able to measure its outcome. (Tukiainen 1999, 40.)

According to Fine (1991) theories about communication in organisations have usually been based on the assumption of cultural homogeneity. Organisational theories have generally been created by Anglo-American men on the basis on the experiences of other Anglo-American

men. (Fine 1991, 260.) Also, American academics have defined organisational miscommunication as failure to be understood, to be authentic, honest and disclosive and to establish an open and clear dialogue. It has been suggested that this definition reflects the cultural preference of mainland-Americans. (Kim & Sharkey 1995, 32.) Varner argues that most communication models are developed by westerners and rely on western cognitive frames. One should be cautious in applying these models since many cultures have their own different cognitive frames, which determine what is considered as logical and rational in their cultures. (Varner 2000, 47.)

Typical concepts in organisational communication literature are *organisational culture* and *communication culture*. Organisational culture is the upper concept for communication culture and other subcultures that emerge in organisations. Hofstede (1998, 270) argues that culture in national level and in organisational level, the so-called corporate culture, are completely different phenomena and the use of common term for both is confusing.

The concept of organisational culture refers to the shared culture of an organisation to the extent that culture exists when people share a common frame of reference for interpreting and acting toward one another and the world in which they live. Organisational culture refers to the organisation's members' perceptions of the functions of the organisation and to the values, features, myths, symbols and communication systems of the organisation. Communication culture is usually defined with the same terms as organisational culture but the emphasis is on communication. (Daniels, Spiker & Papa 1997, 202 – 203.)

What is the relation of national culture and organisational culture in the case of multicultural project organisation? Does the organisation create its own culture or adopt the culture from one of the organisations involved? Or do the individuals operate on the basis of their own organisational cultures for the limited period of time they work in the project organisation? And how does the cultural context affect the working culture? The site organisation works together for few years and it is likely they start forming an organisational culture. On the other hand, the site organisation is located next to the client organisation and its culture is thus influenced by the culture and norms of the “mother” organisation. Even, most of the staff like the secretarial personnel is recruited by the client organisation. The consultants working in the site may bring their own approach to the way things are taken care of; it is because of their expertise and know-how they have come there in the first place.

*Organisational climate* refers to organisation members' perceptions of the operations that take place within an organisation. The climate can be conceptualised and thus measured either as a subjective phenomenon or as an objective one. A sub-concept to organisational climate is *communication climate*. Communication climate is a description of the communication systems of an organisation and thus its conceptualisations should be based on how well the communication actually functions in an organisation. (Tukiainen 1999, 52, 55.)

Another concept that is related to communication culture in addition to communication climate is *communication system*. Communication channels, types of information and arrangements and rules of communication and their relationship form the communication system (Åberg 1989, 62). Communication channel is an established connection between the participants of interaction. Communication rules are unwritten norms that have moulded through the interaction of attitudes and course of action. The rules are a combination of principles, values, criteria, agreements, standards, expectations, assumptions and explanations of communication within an organisation. (Tukiainen 1999, 58 – 61.)

In a project organisation there is no time available for slowly moulding the unwritten rules of communication. All the rules and procedures need to be clear to all participants and organisations from the very beginning to avoid all delays. Probably this is one of the reasons there exist project business professionals, people with experience and expertise who now how to make things work quickly without having to discover ever detail and routine. Naturally the practices develop all the time but at least with the help of the experts one does not have to start from the scratch. Time is money and communication practices need to be effective.

## **2.2. Organisational effectiveness**

According to Eisenberg and Phillips (1991, 246) any acceptable definition of effective communication must be relative to the social context that includes worldview, set of values and point of time. In other words, all definitions of effectiveness are actor-bound, time-bound and culture-bound (Eisenberg & Phillips 1991, 256). How effective communication and not so effective communication are evaluated and interpreted should depend on the culture in question.

There are different criteria for effectiveness, depending on the perspective taken in the organisational theory. According to the classical-structuralist approach the criteria is *clarity*

*and understanding*, the pragmatic approach measures effectiveness on the basis of *goal achievement*, human relations school views *open lines of communication and unrestricted candour* as the criteria for effective communication and according to critical theory the criteria is *open dialogue*. (Eisenberg & Phillips 1991, 247.) At the end, there are no universal criteria for effective communication. Any communication may be effective in some situations.

A typical assumption in organisational communication literature is that the internal communication activities are the determinant of how effectively organisations meet their objectives. According to this view it is essential to the effective operation of any organisation to unify the activities of its members and interdependent subsystems around a common set of tasks that are necessary for accomplishing organisational goals. The greater the effort is to integrate the members through the use of internal communication channels, the greater will be the organisation's efficiency. In addition, if the level of organisational uncertainty increases, the amount of communication should increase accordingly to maintain the level of effectiveness. (Kapp & Barnett 1983, 239 – 241.)

It is evident that the effectiveness of an organisation is related to the integration of its members and its communication with the environment. Other factors that have been shown to affect organisational effectiveness are *task-related activities* that are based on employee productivity, *socio-emotional factors* like employee satisfaction and morale and *innovativeness* that refers to the development of new products and services. (Kapp & Barnett 1983, 242 – 243.)

Each organisation practises external task-related communication, operational communication. Task-related communication is thus separated from other external communication such as PR. Operational communication between organisations is for example keeping in touch with suppliers and contractors, employment authorities, employer and labour organisations, banks, research centres and universities and so forth. Each organisation has their own operational collaborating organisations. What is seen as the most relevant factor in this co-operation is that it takes place in the so-called critical path of the work process. The critical path is the series of interdependent stages of work in which any of the stages might be crucial in slowing the whole process down. Most of the stages in the critical path are about communication, most usually communication between work units. Work gets delayed because some important piece of information was forgotten to put forward. Sufficient and effective communication guarantees the operation of the critical path. (Åberg 1996, 136 – 137.) This Åberg's view of

the importance of the critical path of communication resembles the pragmatic approach the project business has about communication. Communication is viewed as information distribution, as lines of communication between different units, disciplines and organisations.

According to corporatist theory productivity is generated best from strong feelings of corporate loyalty and identification. When the theory is in operation, the employees' sense that they have a say about the matters in the organisation, they acquire a sense of stakeholderhood. In other words, corporatist theory in operation is based on empowerment. Thus management exercises dialectical communication in order to integrate the individual and varied specialised groups in the organisation. In such a setting constructive arguments about task-related matters are viewed as acts of faith in the organisation. Dialectical communication is seen as an instrument for an organisation to achieve its goals and therefore using constructive arguments are acts of loyalty to the organisation. (Infante & Gorden 1985, 117 – 118.)

According to Infante and Gorden (1985, 119) control mechanisms in organisation should be internalised and based on identification with the job and the organisation and indicated by corporate loyalty. In such an organisation upward communication would be encouraged and argumentativeness in task-related matters would not be viewed as inappropriate behaviour. Infante and Gorden (1985) also concluded in their study that argumentativeness is a constructive communication preference while verbal aggressiveness is destructive. (Infante & Gorden 1985, 119, 123.)

Organisational effectiveness depends in part on how power is exercised. Supervisors vary in the way they choose to exercise power with their subordinates. The choices of the supervisors depend on their personalities and on the context of situation where there is a need for expressing one's power. According to Richmond, McCroskey and Davis (1986, 181) use of some types of power, namely the types based on reference and expertise, are likely to be linked with higher satisfaction and improved performance. Other types of power, such as coercive use of power, are likely to be associated with lower levels of satisfaction and performance quality. (Richmond et al. 1986, 180 – 181.)

Supervisor's main function in an organisation is to enhance the probability of effective and efficient work performance by subordinates. From the point of view of the organisation, the most effective supervision accomplishes to alter the work-related behaviours of subordinates



if necessary while sustaining subordinate satisfaction with supervision. (Richmond et al. 1986, 183.) To put it simply, the job of the supervision is to improve productivity and work performance and to keep everyone happy and motivated at the same time.

### 2.3. Group effectiveness

A work community is defined as a part of an organisation that has come to being on managerial or operational grounds. Work communities are groupings of people that are characterised by a common goal, resources, division of work and power, structure of communication, common task and possibility of the members to fulfil their own goals and needs through the membership. (Åberg 1989, 50.) A work community or a work group is the closest part of an organisation to an individual. (Tukiainen 1999, 41.)

Group effectiveness has been defined by Hackman and Morris (1975, 83) as a combination of *task performance strategies, effort and knowledge and skill*. According to Gladstein open communication, supportiveness, active leadership, training and experience in the organisation are positively related with group ratings of satisfaction and performance. Group members are likely to attribute group effectiveness to internal group processes whereas actual group output seems to be influenced more by external market factors. (Gladstein 1984, 511 – 513.)

According to Hersey and Blanchard (1988) group progress and effectiveness are equated with group maturity. Group maturity or “readiness” is a continuous variable influenced by *ability* and *willingness*. Ability refers to the knowledge, skill and experience of the group as a whole. Willingness is defined as the motivation, confidence and commitment to the group as a whole. Other criteria for effective groups are *common goals and purposes*. In a productive group all participants understand the goals. Progress towards these goals is the best way to measure effectiveness of the group. (Hersey & Blanchard 1988, 320.)

Larson and LaFasto (1989, 26) introduced eight characteristics of high-performance management or project teams:

1. Clear, elevating goals
2. Results-driven structure
3. Competent team members
4. Unified commitment
5. Collaborative climate

6. Standards of excellence
7. External support and recognition
8. Principled leadership.

According to Hackman (1990, 13) there are three main determinants for work-team effectiveness. The first is the amount of *effort* group members contribute in accomplishing the group's task. The second determinant is the amount of *knowledge and skills* group members bring to the group and to its task. The third is the appropriateness of the *task performance strategies* the group has chosen in accomplishing its task. According to this model the performance of the group is effective: (1) when its members are highly motivated and thus contribute considerable effort in accomplishing group's task; (2) when the members have necessary knowledge and skills to work on the task and (3) when the procedures chosen by the group actually do facilitate accomplishing the group's task. Hackman also suggests that there are three organisational conditions that are likely to increase the group's effectiveness. These are (1) group structure that encourages competent work of the group, (2) supporting organisational context and (3) available expert coaching and assistance. The first condition includes task clarity, group composition and core norms. The second one refers to organisation's reward, educational and information systems. The third condition is based on the idea that an organisation should not expect the individuals to already know how to work in groups and thus should provide them with adequate training. (Hackman 1990, 9 – 11.)

Hirokawa and Keyton (1995) combined the models of Hersey and Blanchard (1988), Larson and LaFasto (1989) and Hackman (1990) of group effectiveness discussed above. They identified three sets of factors that collectively influence the performance of organisational work groups: (1) individual influences, (2) structural properties of the group and (3) organisational properties. The first set, individual influences includes the ability (knowledge and skills) and motivation (effort) of group members. The second set refers to the norms, goals, interpersonal climate, attitudes and values, strategy and leadership that characterise the group. The third includes the general climate of the organisation, the organisation's reward/reinforcement for rewarding group performance and the amount of coaching and assistance that is available to the group. (Hirokawa & Keyton 1995, 428.)

The model of Hirokawa and Keyton is based on several assumptions. First, a work group is likely to be effective in its performance when its members are knowledgeable and skilful with regard to the task in question, are highly motivated and use a plan or strategy that allows the

group to successfully complete the task. Second, the organisation is in a key position in influencing the amount of task-relevant knowledge and skills the group members have. An organisation can recruit and select the persons most fit to the task, it can train the individuals and provide them with assistance and thus enhance the ability of the group members. Third, both organisational and group factors influence the motivation level of the group members. The organisational factors are: (1) a properly acknowledging and compensating reward system, (2) a support system to aid and to enhance the efforts of group members and (3) coaching and process training. The group factors are: (1) clear group goals that are in harmony with individual goals, (2) a collective commitment to performance excellence, (3) norms that emphasise achievement and success of the group, (4) co-operative attitudes of the group members and (5) competent group leadership. Fourth, the appropriateness of a group strategy is determined by the education the group members receive about the procedures and strategies for task completion; by the coaching that is provided to the group in order to formulate the appropriate strategies; and by the group leader's ability to assist the group in formulating and implementing the appropriate strategies. (Hirokawa & Keyton 1995, 429 – 430.)

Oetzel and Bolton-Oetzel (1997, 307) argue that the model of Hirokawa and Keyton emphasises factors that relate only to performance or task effectiveness and does not take into account personal or relational aspects of effectiveness. Theories or models that focus essentially on the task dimension may be culturally biased. Different cultures are likely to have different perceptions and interpretations of effective communication and effective working of a group. Oetzel and Bolton-Oetzel name three dimensions to effectiveness: task effectiveness, relational effectiveness and personal effectiveness. Different individuals are likely to prefer one dimension over the others because of their personal values, culturally based values and because of the nature and function of the group. (Oetzel & Bolton-Oetzel 1997, 292, 307.)

Berger (1996) lists factors in organisational context that influence the capability of the team to achieve goals. These are the type and style of leadership, purpose or the clarity of the mission, organisational structure, reward systems, mechanisms provided to help the team members and relationships. Relationships refer to relations (1) among peers or between managers and subordinates, (2) between organisational units and tasks performed and (3) between people, systems and technology. (Berger 1996, 106 – 107.)

## 2.4. Communication in a project

A project is defined as a complex transaction that covers a distinct package of products, services and other actions designed specifically in order to create unique capital assets that produce benefits for the buyer over an extended period of time. For example, a building, a “turnkey” factory, a power station can be final products of a project. (Cova, Nazet & Salle 1996, 253.) This definition reflects the typical model of project implementation in North America and Asia where a consultant is hired to be in charge of the whole project management whereas in Europe it is more typical to use consultant as a kind of assisting partner while the client’s position remains strong.

Bubshait and Farooq (1999, 34) define a project as an integrated effort of different disciplines that is achieved by using the available resources within the constraints of cost, time and quality. Webster (1993, 5 – 6) states that all projects have four things in common: all projects involve change, creation of something new or different and they all have a beginning and an ending. Webster’s (1993, 9) definition of a project is “a temporary process composed of changing collections of technologies/operations involving the close co-ordination of heterogeneous resources to produce one or few units of a unique product/service.”

Cova et al. view projects from the seller’s standpoint. The seller in a project can refer to consultant, to supplier and/ or to contractor. According to the view projects have three important characteristics. First, each transaction is unique. A project requires that both internal resources and the organisation’s network of external partners are mobilised to deliver a specified scope of work. Second, each transaction is highly complex. There are usually a significant number of organisations involved, many economic and non-economic parties may be implicated, there might be a multicultural dimension to the project, the cost of transaction is very high and requires complex financial engineering, the duration of the transaction process may be months and the execution may take place over years. The multicultural dimension does not only refer to national cultures and language differences but also to sectoral overlaps. Third, the economic relationship between the buyer and seller is not likely to continue. (Cova et al. 1996, 235.) The third characteristic is likely to apply at least in the case between contractors or suppliers and the client. The consultant’s relationship is slightly different as consultant has sold the consulting service to the buyer. The consultant is likely to have experience of working with the suppliers and contractors and will probably work with

them again in the context of another project. In certain businesses the consultant and the suppliers and/or contractors can be quite regular working partners.

Traditionally the three main concerns of project managers are cost, time and quality. Emphasising the importance of these three has often resulted in neglecting and underestimating human resource management. Handling of people affects the outcomes of projects and thus also cost, time and quality. (Bubshait & Farooq 1999, 34.)

In major projects a project office is formed in order to provide the project manager with support. Staff support has two important functions in any organisational setting. First, staff of the project office assists project manager in controlling the work being performed by the assigned line personnel. These assistants are project engineers. Second, the staff provides expertise support to the project manager in particular specialised area. The title of this specialised staff varies from project to project. (Fleming & Koppelman 1998, 34.)

International businesses co-ordinate their activities through expatriation of managers. Also non-managerial personnel are sometimes expatriated. Most of these non-managerial personnel are sent abroad in order to perform highly technical and specific tasks with limited need to interact with locals. Managers in turn are sent to interact, maintain and form relationships. (Hofstede 1991, 226.) In multicultural projects consulting company may expatriate a manager to work on site, in the local project office. During the different phases of the project technical specialists are sent by the consultant and suppliers on site to perform certain activities.

In the matrixed project model the functional departments of the organisation provide the primary staffing. The project manager defines the actual work to be done and the precise time frames for all tasks and assigns the necessary resources. Project manager's role is to monitor the performance of the work and take action when it is falling behind the project plan. In the traditional matrix form a project manager is held responsible for the performance of the total project and each of the subparts overseen by the project managers. In the team model project engineers are replaced with project team leaders who work as semiautonomous entities and manage themselves independently but still under the overall direction of the project manager. In the project teams the project manager delegates responsibility for performance to these project team leaders. Each team is thus accountable for their performance. (Fleming & Koppelman 1998, 34 – 35.) In the PM the consultant and the supplier organisations used the

matrixed model in their project organisations whereas the site office of the project was organised according to the team model.

An effective technical co-operation between all project teams or departments is necessary for the success of the overall project. Co-ordination of this co-operation is always a challenging task, even more so in the project model where the role of the teams is more independent. All the multiple project schedules must be compatible with the task and with the resources. It is vital to be able to locate key project documents in time. Efficient documentation is a challenge to any project and especially in team-managed projects. (Fleming & Koppelman 1998, 36.)

How can the successfulness of a project be measured? Baccarini (1999) suggests that there are two separate components of project success, *product success* and *project management success*. Product success has three components: meeting the project goal (project owner's organisational objective), meeting the project's purpose (satisfying the needs of the users of the final product) and satisfying the stakeholders' needs in relation to the project product. Project management success refers to the successful accomplishment of cost, time and quality objectives, to the quality of project management process and to the extent the stakeholders' needs were satisfied. Project stakeholders are the individuals or organisations who are actively involved in the project or whose interests are affected by the project outcomes. Project management process refers to all activities conducted by the project management and it thus includes also the successfulness of the communication practices. The concept of project management success measures the success of the project during and at the end of the project whereas the concept of product success is applicable during the operational use and end of the project's product life. (Baccarini 1999, 26, 28 – 29, 31.)

Project success can be measured with "hard" or with "soft" criteria. Hard criteria are objective, tangible and measurable as for example meeting the objectives of cost, time and quality. Softer criteria for success are for example job satisfaction, enhanced reputation and attention to detail. (Baccarini 1999, 30.) The level of communication satisfaction would fall into the soft category of project success criteria. It is interesting how the names of the categories of project success criteria seem to reflect value orientations towards the different aspects of projects. Hard criteria are described as objective and measurable and thus more convincing and rational. In comparison, soft criteria appear to be the less important one, dealing with the subjective experiences of the people involved.

## 2.5. Multicultural project team effectiveness

Effective team communication is one of the major challenges to a success of a project. For a work group to fulfil its full potential is always a challenge, even in the case when all the members share the same cultural background. In the project PM there are various work groups, depending on how to look at it. Each discipline has its own team and on the other hand, the whole site organisation forms a work group with its common goal and resources, division of work and power. The definitions and descriptions of work groups apply also to project work groups expect that in project the time is always limited. Time is a constant stress factor, work needs to be done effectively in time, even more so because each task is a part of a puzzle and the works of others depend on the individual and group efforts.

Bubshait and Farooq (1999, 34) define a project team as a collection of individuals with different needs, backgrounds and expertise. Teams are cross-functional, which is also a characteristic of matrix and project management organisations. According to Haught the success of project teams depends partly on how much understanding the team members have about the goals, processes, background, orientation and thinking of other members of the team. Team effectiveness is seen to depend on the shared understanding of the most effective way of doing things. If these assumptions are not shared, they may create a barrier to team effectiveness. (Haught 1999, 7.)

Today's projects are multidisciplinary by nature and they require management and execution by highly skilled, task-organised project teams whose members are from both customer and contractor organisations. These project teams are multi-organisational and perhaps also multicultural presenting diverse backgrounds and dynamic composition to teamwork. The teams and their members are in key position in developing of critical communications for technically complex and schedule-driven projects. Research has showed that there is a direct relationship between effective team communication and project success. Thomas, Tucker and Kelly (1999) developed a tool, *Compass* in order to improve project team communications. Six communication categories were identified as the variables to measure effectiveness. These were *accuracy*, *procedures*, *timeliness*, *understanding* and *completeness* of communication and *barriers* to communication (Thomas et al. 1999, 15, 24.)

Thamhain (1993, 254) names several barriers and drivers for project team performance. The strongest barriers are: (1) unclear project objectives and directions; (2) insufficient resources;

(3) power struggle and conflict; (4) uninvolved, disintegrated upper management; (4) poor job security and (5) shifting goals and priorities. What drives teams to high performance are: (1) professionally interesting and stimulating work; (2) recognition of accomplishment; (3) experienced project management personnel; (4) proper technical directions and leadership; (5) qualified team personnel and (6) professional growth potential. The characteristics of high-performing project teams are either task-related or people-related qualities. Task-related qualities refer to commitment, result-orientation, quality and to the ability to anticipate trends and problems. Effective communication, high motivation and good team spirit are people-related qualities. (Thamhain 1993, 254.)

The cultural composition of work groups influences the functioning and effectiveness of the group through three mechanisms. *Cultural diversity* refers to the level of cultural heterogeneity that exists in the group. Culturally diverse groups have different patterns of performance compared to culturally homogenous groups. *Socio-cultural norms* refer to the different beliefs and perceptions the group members have about how to behave in a group and what are the desirable outcomes of the group. The third mechanism is *relative cultural distance*, the extent to which group members are culturally different from each other. (Thomas 1999, 243 – 246, 257.)

Berger (1996) suggests multicultural team members to analyse their own cultural profile using dimensions from Fons Trompenaars's (1993) schema. Being aware about the nature and effects of cultural differences can help overcome the possible barriers to adjustment and peak performance within the team. Factors to be analysed are: *relationships with people*, *attitudes towards time* and *attitudes towards nature*. According to Trompenaars (1993, 164) these three are universal dilemmas that every country and organisation face. Cultural differences, once viewed as annoyances or barriers, are likely to inhibit the effectiveness of the team. If the differences are regarded as alternative ways of understanding and implementing the work of the team, the capacity of the team is enhanced. At the end it is a question of individual differences because there are both effective and counterproductive individuals in all cultures. So as Berger (1996, 108) states: "...it is not the presence of individuals from multiple cultural backgrounds that causes problems but rather the presence of those who are either unwilling or unable to carry out the work of the group." (Berger 1996, 107 – 108.)

Understanding how cultural diversity affects social interaction in a group is important for effective functioning of a multicultural work group. Disagreement handling is an important



factor that has an impact on group effectiveness. Once an interpersonal disagreement has developed into full-blown conflict it will lead to disintegration of a group. Also minor conflicts may deteriorate the climate of a group and thus decrease effectiveness. Number of studies has shown that people from different cultural backgrounds prefer different ways of handling conflict. (Smith, Dugan, Peterson & Leung 1998, 352.)

The concept of communication competence is related to effectiveness. Communication competence has to do with effectiveness and/or appropriateness of communication. Effectiveness in communication refers to accomplishing relatively desirable or preferred outcomes. Appropriate communication is communication behaviour that fits the context avoiding the violation of valued rules, expectancies or norms. Appropriate communication is not necessarily conforming or polite since in some situations there are no norms to conform to or because it might be more competent or appropriate to renegotiate the existing norms or rules. (Spitzberg 1994, 31 – 32.) Perceptions of competent behaviour vary across cultures and this may affect the effective functioning of a multicultural work group. Individuals who share the same ethnic socialisation patterns are likely to develop similar expectations regarding competent communication behaviour. This might not be the case with individuals from different cultural backgrounds. These expectations are influenced by culture, type of the context, relationship intimacy and function of the interaction. (Martin, Hammer & Bradford 1994, 160, 162.)

## **2.6. Communication channels**

Certain media are appropriate for certain tasks. According to social information processing model social information refers to normative expectations about communication requirements and collective interpretations of how a medium meets the requirements that are moulded through past experience. Media attitudes and choice of media are shaped by social information as well as by structural characteristics in organisational context. Communication satisfaction has been linked in previous research to understanding expectations as well as to receiving important information. Nowadays when there are a greater variety of media options available in organisations than ever before one would assume that the choice of media also has an impact on communication satisfaction. (Dobos 1992, 32 – 33.)

In organisational theory it has been argued that in organisational context communication has three basic functions: production, maintenance and innovation/ adaptation. The first function

of communication is to provide organisation members with production or task-related information. There are many different kinds of organisations but what is common to all of them is that they have need for disseminate information about task-related matters. Maintenance communication is directed to develop and maintain relationships and to promote member integration and teamwork. The third function of communication, the innovation/adaptation function refers to communication that creates new ideas for improving the organisation products or services and facilitates adaptation to changes that might take place in the organisation. (Dobos 1992, 33 – 34.) In the case of project organisation that is very task-oriented and has a certain timeline for its existence production communication activities is the priority of all communication. One of the important functions of communication in project organisation is problem solving that is by nature both production communication and innovation communication.

Communication channels can be grouped on various bases. Åberg (1996) groups channels for example to internal and external, to operational internal, to direct and mediated and to immediate and remote channels. For instance internal communication is defined as the communication that takes place within an organisation in order to inform the organisation members about the events that take place in the organisation. The channels of internal communication can be grouped on the basis of characteristics such as immediacy or remoteness and direct interpersonal or mediated small group communication. The immediate channels that are based on direct interpersonal communication are: immediate supervisor, other supervisors, division meeting, office meeting, project meeting, negotiations, elected officials, colleagues, work friends and direct communication of the top management. (Åberg 1996, 180.)

Internal operational communication refers to the communication that is necessary for the employees in order for them to complete their work. The channels of internal operational communication can be distinguished to direct and mediated ways of communicating. Direct communication refers to face-to-face interaction whereas mediated communication takes place via some technical medium. Usually the immediate supervisor is the most important source of information concerning one's own work. Immediate supervisor and division meetings provide most information about one's work unit and division. (Åberg 1996, 141 – 144.)

Internal communication is often seen as a solution to all problems that face an organisation. It is assumed that once the amount of communication is increased the problems will just fade away. If the amount of communication is simply increased in an uncontrolled manner, the problem an organisation is likely to face is an informational one. When the information is flooding it is more difficult to find the relevant and the important messages. The need of information is always related to the situation. An effective internal communication system can be characterised by informative messages, data banks and by users who know where to find the information they require. Data banks refer centralised information centres where the needed information can be found fast. (Åberg 1996, 196.)

Dobos (1992) studied gratification models of satisfaction and choice of communication channels in 241 for-profit organisations in mid-west United States. Dobos concluded that the choice of media is partially guided by subjective evaluations by media performance. The choice is influenced by organisation-wide perceptions of the communication functions served by various channels. Media choices in organisations are usually strategic and therefore there is a risk of not making the right choice. It is safe to base the choice on previous experience and on organisational norms even though that means that the choice of channel might not be optimal. Some channels may be more gratifying and are thus preferred, for example face-to-face communication. Supervisors and colleagues are the usual sources of information about the different media. Choosing the appropriate channel is also a question of social competence. The social perspective and the personally preferred channels thus affect the choice also. (Dobos 1992, 45.). In the context of project the choice of appropriate channels is critical. Even simply choosing the channels might not be enough once there is so many parties involved. The geographical distances, the schedule and the type of information that needs to be distributed influence the choice. When a communication technology is used, the correspondence of the systems and programs needs to be verified. Basically, a general guideline for information distribution needs to be established.

According to Dobos (1992, 46) media satisfaction is defined as a transitory expression of need fulfilment, pleasure or displeasure, and comparison of actual to ideal or expected outcomes associated with the personal communication experience. The process of communicating through a channel is satisfying to the extent that the channel serves various communication functions. Still, the communication technology has taken over the communication in many organisations and surely altered the ways and patterns of organisational communication. Many of the communication technologies are still relatively new to its users and thus invite to

compare which embellish the added benefits and satisfaction with new media. Also, the sources of satisfaction and dissatisfaction are changing with the technology. Information overload, distortion and ambiguity of information as well as plain technical problems are likely reasons for dissatisfaction with the new medium. (Dobos 1992, 46.)

A variety of concepts are related to communication channels in an organisational setting. Individuals differ on their reliance on others in the organisation to accomplish their tasks. The degree to which this reliance is perceived is called *work dependency*. In other words, the basis of work dependency is the access individuals have to the information needed for their job. Work dependency focuses on the content of the transmitted information. (Johnson & Smith 1985, 219 – 220.) Another concept that is related to communication channels is *response satisfaction*. Response satisfaction has been defined as an individual's subjective perceptions of a positive affective tone associated with an information source in an interaction situation. The concept of response satisfaction is concentrated on a receiver's perception of the manner in which a source delivers a message. Individuals in organisations are not only interested in seeking out purely work-related information; they are likely to be also affected with the manner in which the information is given to them. (Johnson & Smith 1985, 219 – 220.)

Johnson and Smith (1985) studied the effects of response satisfaction, work dependency, and proximity on the frequency of communication in organisations. They concluded that if individuals are satisfied with their communication links, then they might not be interested in spreading their contacts with others widely. In the research the individuals who had fewer links had a higher level of response satisfaction. It appears that individuals who have not found good enough contacts keep looking and have more contacts than the ones who have found the few that work and they are happy with. (Johnson & Smith 1985, 227.)

Visual and oral media, like face-to-face interaction convey more social and non-verbal cues, allow more interpretation and can be used to resolve ambiguous situations better compared to textual channels like E-mail. Thus it could be assumed that people whose communicator style involves more interaction responsiveness, visual and non-verbal cues and is more implicit would not prefer computer-mediated communication systems. (Rice, Chang & Torobin 1992, 4.) Assuming that personality differences do have an impact on media preference, it could be further assumed that also culture affects the individual predisposition about a certain media. Would not individuals from high and low context cultures have different preferences then? It

could also be assumed that the level of hierarchy should also affect the choice and use of media. Cultures are likely to have different norms and views of appropriate channels in different contexts and in regard with different kind of information.

Rice et al (1992) studied communicator style's impact on media use and evaluation. They concluded that communicator style does not have much to do with adopting, using or evaluating computer-mediated communication systems (Rice et al. 1992, 22). One personality characteristic has to do with media selection. Introversion/ extroversion are related to communication propensity and behaviour. (Russ, Daft & Lengel 1990, 160.)

Media has been characterised by different concepts such as social presence, information richness, constraints of users, accessibility, bandwidth, interactivity, symbolic value and network. According to social presence and information richness approaches face-to-face communication is the richest medium because it involves immediate feedback and personal interaction allowing simultaneous observation of non-verbal communication. E-mail is considered to be low in social presence and in information richness being a text-based medium. Still, perceptions of media sociability, appropriateness or information richness depend also on other factors such as attitudes, context, personal preferences and familiarity with the medium. (Rice et al. 1992, 4 – 5; Russ, Daft & Lengel 1990, 155.)

According to the social influence (SI) model of technology use individuals' media perceptions and use are to some extent socially constructed. Media characteristics such as richness are presented as subjective, meaning that they are influenced to some degree by attitudes, statements and behaviours of others in the workplace. Another factor that influences the media perceptions and use according to SI is medium expertise. Expertise in using new communication technologies facilitates use. SI suggests that media choice and use are a subject to social influence. In addition, the model proposes that media choice and use may be subjectively rational, are not necessarily efficiency motivated and may be created to preserve ambiguity to achieve strategic goals. (Schmitz & Fulk 1991, 490 – 491.)

E-mail is an appropriate communication channel for tasks that require vast amounts of information, documentation, reduction of uncertainty and so on. It is likely that people prefer communicating in a precise manner find E-mail supportive since it allows them to take time to organise and present their thoughts in a documented and accurate form. (Rice et al. 1992, 5, 23.) I might add that in many cases once work-related matters are communicated via E-mail,

it is quite important that the communication is well documented so there cannot be any misunderstandings. Also the fact that the communication is precise with E-mail is quite important when for example technical information is being exchanged. In a project such as PM, the E-mail has two functions as means of sending and receiving information. First of all, E-mail is used to send technical drawings and second, to send textual information like questions, confirmations, feedback and so on.

Job position is a factor that is likely to affect the current media use of an individual. Individual in management positions spend more time interacting with other people, use more oral communication and are more involved in equivocal and in rapid-feedback communication than the regular workers. (Rice et al. 1992, 6.)

## **Summary**

In this chapter the literature regarding effectiveness and projects is reviewed. Effectiveness is one of the key concepts of this study along with successfulness. The aim of this chapter is to outline the main concepts of organisational communication literature to form a background before more detailed discussion of effectiveness. The concept is discussed in three levels, in an organisational level, in a group level and in a multicultural project team level.

After creating the general framework of organisational communication theory and effectiveness, the context of this particular study is discussed, the context of a project. Project organisation is a specific kind of organisation and it differs from static organisations in many aspects, e.g. in its structure, life span and goal-orientation. After familiarising with the special requirements the context of project imposes to communication, the concept of effectiveness was discussed further in the context of multicultural project team.

In the chapters dealing with effectiveness various criteria for measuring effectiveness are offered. One criterion for effectiveness in this study is the functioning of the communication channels. When communication channels function effectively they provide their users with the right amount of information in a timely manner. Communication channels are discussed in the last part of the chapter.

### **3 COMMUNICATION IN A MULTICULTURAL PROJECT ORGANISATION – DISCUSSING THE INTERCULTURAL ASPECT OF THE STUDY**

Culture is an important factor in this study. In a previous chapter multicultural project teams were already discussed to some extent. In this chapter the objective is to discuss culture first in a more general level, defining concepts and introducing some models that offer tools in categorising and thus understanding cultures. Later in the chapter an individual level approach is taken to cultural diversity, discussing the concepts of self and identity in a cultural context. This approach is included in the conceptual basis because even though these issues are not directly included in the empirical research, the implications of the cultural differences in the individual level are included in the discussion of the results. The last part of the chapter is dedicated to management and its cultural implications. Management is also discussed in a multicultural context.

#### **3.1. Definitions and concepts**

A rather comprehensive definition of culture is presented by Latané (1996, 13): “By culture, I mean to the entire self of socially transmitted beliefs, values and practices that characterise a given society at a given time. These shared ideas and habits produce concrete manifestations of a particular culture, its religious doctrines and ceremonies, its etiquette and cuisine, its politics and ways of speech.” According to Latané a culture can be seen as a social reality that guides our actions. (Latané 1996, 13.) According to Triandis “culture is to society what memory is to a person.” Once a person is socialised to a culture, he/she can use custom instead of thought and save time. (Triandis 1989, 511 – 512.) In addition, Hamelink (1989, 419) states that any given culture is perceived differently by many different people, culture has various expressions. According to Matsumoto (1991, 135) culture is a socio-psychological phenomenon that exists within groups collectively and also within each individual. There is often considerable variation in the degree to which cultural norms exist across individuals.

Intercultural communication is according to Porter and Samovar (1994, 7) communication that occurs whenever a message that is produced in one culture must be processed in another culture. The research of intercultural communication attempts to investigate those elements of culture that most influence interaction when members of two different cultures come together in an interpersonal setting. (Porter & Samovar 1994, 7.)

Edward Hall's *Silent Language* published in 1959 was the first study in the field of intercultural communication. Hall's writings on culture and communication had a long-term impact on the study of intercultural communication in many academic fields, including speech communication. According to Shuter (1990, 237) Hall's theories are intra-cultural by nature. By this Shuter refers to the fact that the theories are generated from an understanding of shared values and interaction patterns within similar societies. Still, Hall applied the theories interculturally in order to explain communication issues between dissimilar national cultures. (Shuter 1990, 237.)

According to Shuter (1990, 237-238) most of the researchers in the intercultural communication are less interested in the culture itself and the studies are conducted in order to refine existing communication theories. Culture's function in these studies is merely to provide the researcher with a research laboratory for testing the validity of communication paradigms. It is paradoxical that the study of intercultural communication should ignore the very core of the intercultural research, the culture. Intra-cultural research tends to focus on a particular society or a co-culture within a society, so it is not perceived to be easily translated into the intercultural communication theory. (Shuter 1990, 237 – 238, 240 – 241.)

Intercultural studies can be divided into etic or emic research according to their knowledge of the culture in question. Both of the etic and emic trends of research are descriptive by nature, but etic research uses predetermined analytical categories and schemes whereas emic research does not. Emic research aims for deeper understanding of the cultural patterns. Most intercultural studies in speech communication are neither etic or emic, they aim to identify laws of human interaction rather than describing any cultural patterns. Also, the study of intercultural communication has focused on United States and Japan, while Africa, Southeast Asia, Latin America and Europe have not been as thoroughly investigated. (Shuter 1990, 237, 239.)

When business is included as an essential variable in intercultural communication theory, the theoretical framework refers to *intercultural business communication*. Intercultural business communication deals with intercultural issues, communication and business. It is defined as the communication among individuals or groups from different cultural backgrounds in a business context. Thus intercultural business communication can be distinguished from business communication, intercultural communication and international business. Intercultural communication literature traditionally examines communication in a more general cultural



context. This research on communication behaviour and cultural dimensions can be applied to business situations. Still, Varner argues that because the theory has not been directly tied to business organisations or business activities there was a need to create a new concept, intercultural business communication. (Varner 2000, 39 – 41.)

Participants in intercultural business communication bring to the situation their own cultural backgrounds and corporate cultures. Business interaction is more successful if both parties have an understanding of each other's cultural and business backgrounds. The objective of the interaction is to find a common ground, to create a transactional culture of interaction, which is acceptable to both parties, to their governments, cultures and organisations. The resulting transactional culture is a complex system of layers of culture, communication and business. In intercultural business communication the business strategies, objectives and practices are an integral part of the communication process and they also form the basis for the creation of a new environment out of synergy of culture, communication and business. (Varner 2000, 43 – 44.)

Knowledge in intercultural communication is a precondition for successful intercultural business communication. The areas of cultural information the business people should be familiar with prior to the interaction are: national culture, general business culture and specific corporate culture. They should also be aware on the individual communication styles because cultures do not communicate with each other, individuals do. Even though simplistic view of culture leads to stereotyping it should be remembered that without any generalisations meaningful intercultural business communication would become even more difficult. It would not be very practical or productive to concentrate only on individual and approach in every intercultural communication situation from ground zero. The successful communicators in intercultural business environment are able to recognise their tendency to evaluate everything on their own cultural framework and are willing to adjust their views in light of new evidence. (Varner 2000, 44 – 46.)

Cultural strategy, business strategy and communication strategy are interrelated and form an intercultural business communication strategy. Varner present a list of values, adapted from various researchers (e.g. Hall 1959, Hofstede 1980 and Trompenaars 1993) that influence the cultural strategy: (1) the individual, (2) the role of hierarchy, (3) attitudes towards formality, (4) high context vs. low context orientation, (5) time orientation, (6) attitudes towards risk and uncertainty, (7) the relationship of individuals to the universe and (8) feelings of own

culture's importance as expressed in the self-reference criterion. Communication strategy is influenced by corporate communication policies, personal preferences, availability of technology, functional expertise of the communicator, individual goals and career aspirations and one's position in the firm. In addition, the preferences of the audience and the objective of the communication are likely to affect the choice of strategy. Language also affects communication strategies. People using a foreign language bring many of their own cognitive frames to the communication. (Varner 2000, 46, 48.)

In intercultural business communication the purpose of the communication is business. Cultural and business considerations influence channels of communication, levels of formality, use of technology, content and style of delivery. The determinants of the intercultural business communication strategy are the objectives of the business, the level of internationalisation and the structure of the organisation. (Varner 2000, 49.)

### **3.2. Theories about cultural variability**

Hofstede's (1991) somewhat controversial theory of cultural dimensions classifies cultures according to characteristics such as *individualism – collectivism*, *small power distance – large power distance*, *weak uncertainty avoidance – strong uncertainty avoidance* and *masculinity – femininity*.

Hofstede's dimensions have been applied as a paradigm, where the questions and the dimensions are used as taken-for-granted assumptions. Thus the dimensions are used as a conceptual framework outside their original setting. The dimensions are used to classify and explain the influence of culture on the research topic. In addition, researchers have found the Hofstede's dimensions especially advantageous in furthering their argument or in putting their theories and explanations into a clarifying perspective. Particularly within the fields of management and organisation the dimensions have been applied as a paradigm to questions such as leading a multicultural work force, motivation and human-resource management. (Søndegaard 1994, 453.)

Individualism refers to the tendency to be more concerned with the consequences of one's behaviour for one's own needs, interests and goals. Collectivism is defined as the tendency to be more concerned with the consequences of one's behaviour for in-group members and to be more willing to sacrifice personal interests for the attainment of the collective interest. Tight social networks characterise collectivism. People distinguish between their own groups such as

relatives or organisations and other groups. People expect members of their in-groups to look after their members protect them and give them security in exchange for member's loyalty. Members of collectivist cultures place importance on fitting in smoothly and also on saving face. (Adler 1997, 47 – 48.) In individualist cultures the distinction between in-groups and out-groups are less important than in collectivist cultures where behaviour toward in-group members and values like interpersonal harmony and group solidarity are emphasised. Individualist cultures emphasise values like autonomy, competitiveness and self-sufficiency. Western Europe and North America are classified as individualist and Asia, South America and Southern Europe as collectivist societies. (Smith et al. 1998, 352.)

Cultural identity has been viewed along the dimension of individualism-collectivism. In a conceptual level culture-level and individual-level value dimensions can be expected to be related. Cultural dimensions such as individualism-collectivism are rather broad conceptualisations for explaining differences in individual-level behaviour. Still, the concept of individualism-collectivism has been described as probably the most important dimension of cultural differences in social behaviour across the diverse cultures of the world. In addition the concept has been used in explaining differences in communication style between cultures. (Kim & Sharkey 1995, 22, 24.)

According to Adler (1997, 51) the dimension of power distance measures the extent to which less powerful members of organisations accept an unequal distribution of power. Smith et al. define high power distance cultures as those in which inequality is more tolerated and deference received by high-status people is markedly different from that received by those who are of lower status. Collectivist societies often score high on power distance dimension. In individualist cultures status differences are less significant and authorities are given less respect. (Smith et al. 1998, 352.)

The uncertainty avoidance dimension measures the extent to which people in a society feel threatened by ambiguity and therefore try to avoid ambiguous situations by providing career stability, establishing formal rules, rejecting unconventional ideas and behaviour and accepting the possibility of absolute truths and the attainment of expertise. (Adler 1997, 51.)

Other dimensions of cultural variation are *cultural complexity and tight versus loose cultures*. Complexity of a culture may be determined by analysing its language, technology, economy, political and educational systems, religion, aesthetic pattern and social structure. The more

distinctive elements can be distinguished, the more complex the culture is. One consequence of high complexity is that individuals have more potential in-groups to have relations with. When the number of potential in-groups increases, the loyalty of individuals to any one in-group decreases. Also, the prosperity of a society results in enhanced individualism that is a result of increased economic independence. Triandis argues that once societies become more complex and wealthy, they can also become more individualistic. Tight cultures are relatively homogenous and the norms and values of in-groups are similar. Such cultures have little tolerance for deviation from group norms. Loose cultures are more heterogeneous and either have unclear norms about social situations or tolerate deviance better. (Triandis 1989, 508 – 511.)

Trompenaars (1993, 8) argues that cultures differ in seven fundamental dimensions. Cultures distinguish themselves from others through the solutions they choose to certain universal problems. These problems and also the cultural dimensions fall into three categories: relationships with people, attitudes towards time and attitudes towards to the environment. Trompenaars argues that there are five orientations that describe the human interaction. The first one is universalism vs. particularism. In universalistic cultures there is the right way and the wrong way and the same rules apply to all in all situations. According to the particularistic view obligations of relationships and unique circumstances can justify stretching the rules. The second orientation is the Hofstede's familiar dimension of individualism vs. collectivism. The third orientation of neutral vs. emotional cultures refers to the appropriateness of emotion expression. Specific vs. diffuse cultures are distinguished by the value that is based on personal contacts and personal relationships in business context. Achievement vs. ascription cultures differ in the basis the individuals are being judged. In achievement cultures people are judged on the basis of their recent accomplishments whereas in ascription cultures the status is attributed to a person by birth, kinship, gender or age, network and degree of studies. (Trompenaars 1993, 8 – 10.)

Cultures differ in emotional perception. According to Porter and Samovar (1998, 456) cultural dynamics influence the display of emotion. These influencing aspects are *display rules*, *antecedent events*, *individual-collectivism and power distance dimensions*, *context*, *non-verbal communication* and *language*. Display rules refers to cultural influences on what individuals learn about the appropriateness of displaying certain emotions in various situations. Antecedent events refer to external events that cause emotional experiences. Cultural diversity of these events and the effect they have on emotional states may be seen by

looking at the emotions of joy and happiness, sadness and grief, fear and anxiety and anger and rage. Context influences the interpretation of emotions. Social environment is the key in determining which emotions may be displayed and how those emotions should be interpreted. Hall (1976) created a concept of high- and low-context cultures. According to Hall cultures may be categorised on the basis on how much meaning their members attach to settings. Contextual differences result in differences in expression. In low-context cultures most of the information is in the verbal message or in facial and bodily movements. In high-context communication most of the information is either in physical context or internalised in the person. Culture can affect non-verbal communication. For example in Mediterranean cultures exaggeration of signs of emotions like grief or sadness is not uncommon. Language is a guide to deriving emotions. Languages and linguistic diversity affect emotional communication in terms of language structure. (Porter & Samovar 1998, 456 – 458; 463 –465; 469; Singelis & Brown 1995, 361.)

Fiske (1991) isolated four elementary structures that people according to him use to guide their action and to make sense of and respond to the social action of other people. Fiske's interdisciplinary typology is unique in the sense that it incorporates culture as a key dimension in determining the expression of the four elementary models. The rules of the culture determine how the models are played out but the basic structure remains the same. The four structures are: *communal sharing*, *authority ranking*, *equality matching* and *market pricing*. The four structures may be applied to all social relationships in all cultures. Some models are likely to be predominant in some cultures. In addition, according to Fiske the four structures operate at all levels from interpersonal to international relations. Determination of which model is in operation depends solely on the participant's point of view. (Hoppe, Snell & Cocroft 1996, 58 – 59; 66 – 67.)

The model of communal sharing is somewhat similar to Hofstede's notion of collectivism. Once relationships are organised on the basis of communal sharing individuals view themselves in terms of *we* instead of *I*. Thus belonging to a group is important and there are clear boundaries to differentiate outsiders from in-group members. Emphasis is on the well being of others and this influences decision-making, persuasion and group identity. According to the model of authority ranking interpersonal relationships are based on hierarchy and status differences. The manner in which control is exercised and the rules, which determine the criteria for achieving rank, vary according to culture. The model of equality matching refers to relationships that function on the basis of equality, all have equal status. Culture determines

who is considered equal. According to the model of market pricing relationships are entered into as contracts. Individuals look for relationships that they may gain most of and that are most rewarding and not costly. (Hoppe, Snell & Cocroft 1996, 59; 62 – 66.)

### **3.3. The self and cultural identity as an approach**

People in multicultural organisations employ different communication strategies than they do in organisations that are culturally homogeneous. Researchers have noted areas where the differences usually occur: work-related requests, mediation/ negotiation strategies, decision-making processes and discussion behaviours. Most of these studies in cross-cultural communication are merely descriptive; they outline the communication patterns of different cultural representatives. This line of research does not go beyond the surface level of the culture and does not attempt to explain any underlying reasons for the noted behavioural differences. A theory of intercultural communication should be based on both the individual and culture –level analyses. (Kim & Sharkey 1995, 21.)

Using only one explanatory variable, the culture, in intercultural communication research has raised questions. Cultural differences have been used in explaining individual differences in communication behaviour without first pondering how cultural differences correspond to individual-level differences. (Kim & Sharkey 1995, 24.) Triandis (1989) applied the concept of *self* to explain culture's influence on behaviour. Triandis defines the self to include all aspects of self including attitudes, beliefs, intentions, norms, roles and values. This definition indicates that every side of a person's social motivation is linked to the self. The self influences the way information is sampled, processed and assessed. (Triandis 1989, 506.)

Some of the aspects the self consists of are shared with other individuals who have the same *subjective culture* meaning that they share a common language and they are able to interact because they live in adjacent locations during the same historical period. Triandis (1989) argues that some aspects of the self might be universal. Basic needs are same to everyone. The greatest distinction between the aspects of the self is the emphasis on the *private*, *public* and *collective* self. The private self refers to cognitions that involve traits, states and behaviours of the person. The public self refers to cognitions about the generalised other's view of the self, to how the person thinks the others perceive him or her. The collective self has to do with cognitions of oneself in a collective, how the person is perceived by his/hers collective groups. People sample these three kinds of selves with different probabilities in

different situations and in different cultures. The different sampling in different cultures is based on the complexity, level of individualism and looseness of the culture. The major determinant of social behaviour is the kind of self that operates in the particular culture. (Triandis 1989, 507, 517.)

The independent-interdependent construals of self refer to the degree to which an individual perceives herself or himself either as separate from others or connected to others. The construals of self have been suggested to parallel with the cultural dimension of individualism-collectivism. These construals have been proposed to be universal aspects of self that can be measured at an individual level. Research has provided support for these two dimensions of self to exist within each individual aside from his/ hers cultural identity. The construals have a wide range of implications to communication behaviour. Individuals whose self-construal is dominantly independent assert their needs with direct, clear and non-ambiguous forms of communicative strategies that make their intentions evident to the hearer. In individualistic cultures autonomous, self-sufficient individuals that are motivated by self-fulfilment are appreciated. In collectivist cultures, in turn, harmonious interpersonal relationships and preservation of others' face are valued in interaction. To an individual with an interdependent self-construal meeting another's goals, needs and desires is necessary for satisfying own goals, needs and desires. These social-relational concerns are usually communicated indirectly and using non-verbal strategies. Independent self is self-contained and steady compared to the interdependent self that does not exist without the others and the contexts. (Kim & Sharkey 1995, 25 – 26; Singelis & Brown 1995, 358 – 360.)

The independent and interdependent construals of self have been linked to group effectiveness. Independent self-construal has been associated with task outcome and the interdependent self-construal has been associated with relational outcome. Both dimensions are important and interrelated; the association with either self-construal merely highlights the tendency of the particular type of self. What is an important element for both effectiveness and self-construal is the situation. In different situations an individual may activate either or both self-construals and thus be concerned with different aspects of group effectiveness. (Oetzel & Bolton-Oetzel 1997, 305 – 306, 310.) So assuming that self-construal are context-bound as are the perceptions of group effectiveness, would it not be likely that in multicultural context like in the PM project site organisation the individuals would adopt that self-construal that corresponds to the situation? It would be likely that the most suitable self-construal would be independent self-construal associated with the strong concern with task outcome. On the

other hand, even though the atmosphere is hectic at the site, most of the organisation members are Portuguese, members of a collectivist culture with a concern of the relational outcome. The situation seems to require the use of both self-construals.

Another concept that resembles the interdependent-dependent construals of self is the concept of control. Locus of control (LOC) is defined by Rubin (1993, 162) as a mastery of one's environment. LOC is a personality trait that affects communication behaviour and motivation to communicate. Expectations about one's ability to influence others and attitudes one has about oneself in relation to others are based on LOC. People can be roughly divided into *internals* and *externals* on the basis of LOC. Internals feel and expect to have control over the events of their lives. They are assertive and extrovert. Externals are fatalistic and do not perceive to have power over their life events. According to this characterisation the externals are bound to be less satisfied with communication in general than the internals. Active communicators as internals seek gratification and are more goal-oriented in their communication. (Rubin 1993, 162.)

People who work in overseas assignments or in multicultural projects usually have to meet certain criteria before they are assigned for the job. In a multicultural project such as PM, most people from the consultant side and from the supplier companies are experienced self-assured professionals who know their worth. I would argue that most people working in this profession and in the kind of surroundings of for example PM are in most cases internals. From a cultural point of view, the fact that externals would not be active communicators is questionable. Just being active to communicate does not necessarily reflect assertiveness nor effectiveness. Depending on the situation, taking the initiative to communicate can be interpreted differently.

Identity is a complex and abstract concept. Assuming that identity can be defined as a self-conception and that self-conception has different domains, there are several corresponding aspects to an identity. Identity is one's theory of oneself. A person's *total identity* can be divided into multiple "identities". These different identities are interdependent. (Cupach & Imahori 1993, 113 – 114.) Identity can be defined as the mosaic sense of self-identification that incorporates the interplay of human, cultural, social and personal images as consciously or unconsciously experienced and enacted by the individual. Even though there is a sense of stability to an individual's sense of generalised self, each communication episode has an effect and changes this mosaic of self-identification. This is because every communication



episode has some elements of strangeness or novelty because of the reconfiguration of persons, situations, and spatial-temporal and cultural contexts. (Ting-Toomey 1993, 73 – 74.)

*Social identity* and cultural identity are somewhat similar concepts. Social identity is defined as a part of an individual's self-concept that reflects his/hers knowledge of his/hers membership in a social group together with the value and emotional attachment to that membership. Social identity is based on shared social beliefs and representations. Belonging to a group or to groups are especially important for self-conceptions in collectivist cultures. Social identity is thus emphasised in collectivist cultures while individualistic are more focused on personal identity. (Gudykunst, Ting-Toomey & Chua 1988, 93-94.)

Collier and Thomas (1989, according to Cupach & Imahori 1993, 114) define *cultural identity* "as identification with and perceived acceptance into a group that has shared systems of symbols and meanings as well as norms/rules of conduct". Thus culture, when defined broadly, can refer to ethnic, racial, social-economic, occupational or gender or other social groups. A person can have several interconnected cultural identities. *National* or *cultural identity* is a part of individual's self-identity and self-image. For example the way the Finns perceive themselves as Finns, forms a dimension of the Finnish national image. It is also a part of the Finnish self-image. Self-image and the national image, the individual identity and the social identity and the cultural identity are all entangled and inseparable. Auto-stereotypes form a part of them all. (Lehtonen 1993, 15.)

The different aspects of individual's identity can also alter and overlap. The identity is not a static construct. For example, when two people with separate cultural identities have a relationship to the extent that their relationship can be considered interpersonal instead of intercultural. Their cultural identities have receded into the background and their individual personalities have become evident. (Cupach & Imahori 1993, 115.) Once people work together on daily basis, their relationship is also likely to extend itself from intercultural to interpersonal. The individuals interact and deal with each other, not the cultures. When you get to know someone, after a while it might be difficult to differentiate between what part of his or her behaviour is culturally bound and what is not. And what is the difference between them and what does it matter after all? Everyone is a combination of nature and nurture and once we are in the interpersonal level, all cultural level assumptions seem to be generalisations and thus not very fruitful.

### 3.4. Management and culture

Traditionally management approaches developed in one culture have been deemed to be valid in any other culture. How could that be possible? Hofstede (1998) argues that there are no such things as universal management theories. Hofstede criticises the U.S. academic community being slow in accepting that not only practices but also the validity of theories is likely to stop at national borders. Ideas and theories always reflect their time and their society and cannot be simply lifted out from their context and applied to some other culture in some other period of time. There is management and managers in all countries but their meanings differ from one culture to another. Management cannot be isolated from the other processes of the society. (Hofstede 1998, 259 – 260, 267.)

Laurent (1986) conducted a study of philosophies and behaviours of managers in nine Western European countries, United States and three Asian countries (Indonesia, Japan, and China). The results suggested that there is no universal idea of management. Every culture has developed its own unique and specific insight into the managing of organisations and of their human resources. (Laurent 1986, 96; Adler 1997, 42.)

Laurent's research showed that managers from different national cultures hold different assumptions regarding to the nature of management and organisation. These assumptions shape value systems, which are reflected in different management and organisational practices that in turn reinforce the original assumptions. Thus human resource management practices are likely to be most sensitive to cultural diversity as they are designed by members of a given culture in order to handle others of the same cultural background. Multinational corporations' solution to overcome the complexity of human resource management is the attempt to create *corporate culture*, a supra-culture that would substitute the troubling national cultures and form the basis for their managing people. (Laurent 1986, 97.)

The existence of organisational cultures does not exclude the existence of national cultures. Laurent claims that even though there are organisational cultures, it would be naive to expect that the short history of modern corporations could shape the assumptions and behaviours of their members to an extent that it could even be compared to the age-long shaping of civilisations and national cultures. According to Laurent's research indicates that corporate cultures of multinational corporations do not seem to reduce national differences in basic management assumptions across their subsidiaries. In the contrary, it appears that instead of

reducing or eliminating national differences, organisational culture maintains and enhances them. Laurent suggests that the concept of organisational culture should be restricted to the more superficial layers of implicit and explicit systems of norms, expectations and historically based preferences. (Laurent 1986, 97 – 98.)

Laurent's study investigated a vast range of issues related to management. One of the issues was how the managers perceived organisations. The extent to which the managers viewed organisations as political, authoritarian, role formalising or hierarchical in their relationships systems varied across cultures. There were differences also in perceptions of manager's role, whether the manager is perceived as a problem solver or as an expert. Opinions and views of effective managers and their management were clearly different in Europe, North America and in Asia. (Adler 1997, 46.)

One issue that is related to management and that is also important to this study is motivation. What motivates people to work is not always the same in all cultures. What is considered rewarding in one culture could be meaningless or even insulting in another (Francesco & Gold 1998, 88). In a multicultural project management context, one approach to motivating the project team is to set the objective on creating a *project culture* that is most suitable to the project objectives and the group's culture. The purpose of building a project culture is to obtain a co-operative spirit, substitute any us-against-you feelings with a strong *our project* view. (Dinsmore & Benitez Codas 1993, 462 – 463.)

## **Summary**

This chapter deals with the issue of culture, one of the most important variables of this study. In the first section concepts of culture and intercultural communication are defined and discussed. Some other concepts are also introduced such as intercultural business communication, a theoretical framework combining intercultural issues, communication and business. In the second section theories about cultural variability are discussed starting from the “gurus” of the field, Hall, Hofstede and Trompenaars. The third section deals with the self and identity as explanatory variables in intercultural communication research. The final section deals with management in cultural and in intercultural contexts.

## **PART II – EMPIRICAL STUDY**

### **4 PURPOSE OF THE STUDY**

#### **4.1. Research questions**

The main goal of this thesis was to be able to give feedback about the communication of PM to the participants of the project. The objective of this research was to measure successfulness of communication in project PM. The successfulness was operationalised in this case as the level of communication satisfaction, efficiency of communication channels in transmitting information and general effectiveness of communication. Part of the feedback was to report what was successful, what could have been improved and what should be taken into consideration in the future projects. The participants of the project, the members of the project organisation(s) were considered as the experts of this project and thus the sample was created of them, 139 were included in the first phase (questionnaire) and 11 of them to the second (interview).

The variables of the study were:

- Communication satisfaction
- Channel (media) gaps: differences between information received and desired from certain channels
- Information gaps: differences between information received and desired
- Shortcomings in communication flow

Before the communication of the project could be analysed, one should also be familiar with the communication practices of the particular organisation to be studied. As the project organisation was quite complex and feedback was required from all the levels possible the research questions were also likely to cover a vast range of subjects. One of the aims was to understand the roles of the different parties involved in the project.

The research questions are:

- RQ1            How satisfied the project organisation members were with the communication in the project PM?
- RQ2            What were the main shortcomings in the communication of the project PM?

- RQ3 Did the project organisation members receive all the information they desired from the information channels in the project PM?
- RQ4 Did the project organisation members receive all the information they desired in the project PM?
- RQ5 How did the different parties (client, consultant, supplier) relate to each other in the project PM?
- RQ6 How did the multiculturalism affect the work and the interaction between the project organisation members in the project PM?
- RQ7 What was successful in the communication of the project PM?
- RQ8 How successful was the communication of the project PM according to the organisation members?
- RQ9 How could the communication practices of the project PM have been improved?
- RQ10 What is effective communication in a project?

In addition, a general objective was to describe the communication practices and day-to-day communication of the project PM.

The initial idea for the research came for the project manager of the consultant. The project PM was at its final stage and there was an interest to obtain feedback about the communication of the project. In the project of PM communication has received special attention. In the initial phase a seminar about communication side of the project was organised to the employees of the client and the consultant.

The project manager has an active role in the study. He assisted with making of the data-collecting tools, the questionnaire and with the interview guide in order to make sure that the questions and statements were relevant and suited the context. Even though the initiative for conducting the research came from the consultant organisation and the consultant also was of great help in the implementation of the study, the perspective of the study is objective, not viewing the situation from any particular viewpoint but analysing the communication of the project through the impressions and perceptions of the project organisation members. Thus the perspective is rather the one of the individuals than of organisations.

## 4.2. The project PM

In December 1998, a Portuguese company decided to implement the project PM. The objective of the project was to install a second paper machine to an existing paper mill. The idea of the project was already formulated in 1995, when a three-phase development plan was established, consisting of pre-engineering, appraisal and implementation. The Portuguese company, from here on referred as the client, appointed a Finnish consulting company as consulting and engineering partner for execution of the plan. This consulting company had worked in the same role in a previous and very successful paper project of the client.

A paper mill project has many different phases. The first phase is the pre-engineering. Pre-engineering covers all key elements of project implementation such as: formulation of technical design concept interfaces to existing mills, project implementation plan, investment estimate, profitability calculations and enquiries and technical/commercial negotiations with main equipment suppliers.

During the second phase, the appraisal phase the main equipment suppliers are selected and preparations are made for civil contracts. In the case of PM, the final go-ahead decision was postponed, but the client maintained its readiness to reactivate the project. The project organisation was kept on stand by and the selected machine suppliers were also kept informed about the status of the project. Because the project had been postponed for 28 months, some of the planning had to be done once again in order to take advantage of the most recent development in the machinery. The total implementation time for PM from the Board's decision to production test run was 19 months.

The main objective of the implementation phase is to construct the mill without compromising quality or cost-effectiveness. In the PM the project implementation was based on the owner/engineer partnership method. The client had a construction management team supervising the project and the main consultant was responsible for design and supporting activities. This method gives the owner a full control over all activities in the project and it also demands a great deal from the project team and from the engineering consultant.

In PM contracts were made with over fifty suppliers or contractors. There were supplier or contractor companies from ten different countries: Portugal, Finland, Sweden, Germany, Spain, France, Netherlands, Austria, UK and USA. It should be noted though that nowadays it

is not so easy to state the nationality of a company as many of them are more or less international having offices around the world and employees from all over the world.

In order to illustrate the size of the objective of the project PM and thus the size of a paper mill project it is useful to take a look of some technical data:

<b>Paper grade:</b>	50-100g/m <sup>2</sup> wood-free fine paper Including A4/A3 copier, offset sheets/reels
<b>Production:</b>	400 000 t/a
<b>Paper machine:</b>	Drive speed 1700m/min Trimmed width 8650 mm Design production 1500 t/d
<b>Sheeters:</b>	Two cut-size lines á 120 000 t/a Two folio-sheeter lines á 65 000 t/a

In projects the work is estimated in hours. In the project PM only at the site office 2 million hours were completed. At the busiest stages of the project the site employed 1500 people. The building area of the new paper mill covered 72 000 m<sup>2</sup>. The investment of the project was around 1800 million Finnish marks.

## 5. METHODOLOGY

The subject of the research, the multicultural project PM presented various requirements for the methodology and to the data gathering. First, the organisation members excluding the site organisation were scattered around Europe in various countries and locations. Second, it was known that the organisation members were extremely busy, so caught up in their work that they were not likely to have much excess time to spend with the research. Third, the sample would not be very large as the project organisation did not include very many people. Fourth, the project organisation was quite diverse, the organisation members presented various cultures and even though the official working language was English, the language skills varied greatly across the sample.

Data were collected by two instruments: a questionnaire and an interview. The two tools were designed to supplement each other. Mattila (1996, 209 – 210) recommends a triangulation in which two or more methods are used side by side especially in cases of small groups or organisations. When small groups or organisations are studied with only a method of a structured and standardised questionnaire, the reliability of statistical results is questionable.

When planning the methodology for a research of intercultural communication, one should take into consideration various factors. The methods should be flexible in the case of possible errors and surprises that may take place during the data gathering. When the context of the research is not familiar, one should pay special attention to the internal validity of the research. The reliability of the arrangements of the research should be reconsidered in each cultural context that will be studied. Special attention should also be paid to the criterion of choosing the population to be studied and the availability of the sampling. The sampling methods the Western communication research favours, like random sampling, are not always applicable to the research of intercultural communication. A group of respondents is often more practical than a single respondent. (Johnson & Tuttle 1989, 470 – 474.) Random sampling was not an option in this case as the research is a case study and the chosen case, the project does not include very many people.

It should be also noted that concepts couldn't be operationalised in the same way in all cultures. The implementation of the research in practise is not necessarily directly transferable to another culture but might need some adjusting. The challenge is to make the arrangements comparable in each culture in a way that they will still be also valid in their own cultural



contexts. (Johnson & Tuttle 1989, 470 – 474.) The main consultant project manager provided the researcher with knowledge of the special context of the project and assisted in forming the statements of the questionnaire and the questions of the interview guide to apply to the project.

The methods were chosen because different kinds of information were needed. As the main objective was to estimate the successfulness of the communication in the project and to provide feedback about the communication, it was necessary to gather general information about the topics that have been operationalised. The questionnaires have many advantages over other methods of data gathering. The primary advantage is sample size. Questionnaires can be given to all in the same time frame so it is relatively fast method. Questionnaire is also a cheap way of gathering information. Another major advantage of the questionnaire is that it guarantees a certain amount of anonymity and thus sensitive information can be obtained. Questionnaires also provide a permanent written record that can be restudied. The questionnaire may be designed in a way that the analysis of the answers is relatively easy. Questionnaire also has the advantage of compromising a large number of topics. (Downs 1988, 80.) Questionnaire was the method of choice also because a big part of the respondents were scattered around Europe, it was the easiest and cheapest way to reach the respondents. It was also thought that the questionnaire would be an easy method considering the respondents, completing the questionnaire should not be so time-consuming.

Another method, interview was chosen because more detailed information was required to back-up the data gathered with the questionnaires. Also, additional information was needed about the communication practices and the every-day experiences of the project. According to Downs (1988, 49 – 51) the method of interview has several advantages. Interviewer develops familiarity with the people and the organisation in a way that is not possible through any written media. Face-to-face discussion allows detailed discussion of topic areas. An interview enables the interviewer to gather a large amount of rich in-depth knowledge during a relatively short time. In an interview it is possible to gain important information about topics and subjects that would not have come up otherwise. Face-to-face interaction is rewarding and motivating to the respondent. The disadvantages of interviews are that they are extremely time consuming, not only to the interviewer but to the interviewee. Analysis is more challenging as the information obtained is more difficult to code, analyse and interpret than the information provided by a questionnaire for example. (Downs 1988, 49 – 51.)

When the method used is interview, the interviewer holds a key position in the success of the research. In the ideal case the interviewer would be from the same ethnic group with a similar social status as the interviewees in order to minimise the affect the interviewer's persona. (Johnson & Tuttle 1989, 475 – 476.) The interviewer should pay attention to the context of the interview. Also, some misunderstanding may occur if the interviewee is forbidden to use his or hers mother tongue in the interview. If there are difficulties with understanding or with the chosen topic, the interviewee might use expressions and ways of communicating that are typical to his or hers culture, which the interviewer who is using his or hers own language cannot understand despite the common language. (Katriel 1995, 274.)

The research questions 1 and 2 that handled the questions of communication satisfaction and the main shortcomings in the communication were covered in the questionnaires. RQ3 and RQ4, the questions dealing with the channel and information gaps were dealt with in both the questionnaires and in the interviews. RQ5 and RQ6, the questions dealing with the relationships of the different parties and the issue of multiculturalism formed the central topic for the interviews. Research questions 7,8 and 9 were handled in both instruments, whereas RQ10 was dealt with only in the interviews. So the methods were used to implement each other, to compliment and verify the information obtained with each and also to provide new information. The data gathering took place during the spring and summer of 2000. The questionnaires were sent in April. The first interview was conducted in May and the last in September.

### **5.1. Respondents**

The sample for the questionnaire consisted of 56 men and women who were or had been working in the project PM. The answering rate to the questionnaire was quite low, only 40%. The sample was decided together with the project management of the consultant. The sample was decided on the basis how involved the respondents had been in the project and how many active contacts they had had to the other parties during the project. Everyone of the site project organisation was included.

The interviewees were also chosen with the assistance of the project manager. According to Downs (1988, 65) if the interview is being used to supplement the use of questionnaires, not as many participants need to be used as if the interview was the only data-collecting tool. In this research the interview was used to supplement the use of questionnaires as well as to

collect new information. In this research eleven interviews were conducted. Six of the interviewees were project managers and the rest belonged to the so-called core organisation of the project. As was the case in the questionnaire respondent sampling, the interviewees were chosen on the basis of involvement to the project. Another requirement was that all the main parties of the PM were represented. The main parties were the client, the main engineering consultant, the civil engineering consultant and the main supplier. The interviewees that did not belong to the management represented different disciplines of the project. Among the interviewees there were three different national cultures represented, Finnish, Portuguese and German. The criterion of the sampling for the interviews was to gather information from as many sides as possible. Choosing the right informants, the key informants as they were referred to during the research were the ones who were, according to their job descriptions, in central position in information distribution.

The background information the respondents were asked to give was:

- What organisation do you belong to?
- What is your main activity?
- What is your nationality?

Below is the summary of the respondents of the questionnaire classifying the respondents on the bases of their organisation and nationality. The table also presents the numbers of questionnaires received from each organisation and nationality. The Finnish consultants were the biggest distinctive group in number that answered the questionnaire with 19 respondents. 28 of the respondents present the suppliers, which come from six different countries.

**Table 5.1.1. Summary of the respondents of the questionnaire**

Organisation:	Nationality:	Questionnaires received:
<i>The client</i>	<i>Portuguese</i>	5
	<i>Finnish</i>	2
<i>The main consultant</i>	<i>Finnish</i>	19
	<i>British</i>	2
<i>The suppliers</i>	<i>Finnish</i>	9
	<i>Portuguese</i>	7
	<i>German</i>	5
	<i>Swedish</i>	4
	<i>Spanish</i>	2
	<i>Dutch</i>	1
<i>Count:</i>		56

The respondents were categorised into four different groups by their main activity and their organisation. In the count there is one less answer in this categorisation than in the previous one of table 5.1.1. One respondent, apparently from the client, did not fill in the background information on his/hers activity. Most of the respondents, 26 are designers. The second biggest group of 16 respondents belong to the management of the project.

**Table 5.1.2. The respondents categorised by activity**

Activity:	Organisation:			Count
	<i>The client</i>	<i>The main consultant</i>	<i>The supplier</i>	
<i>Project management/ co-ordinator</i>	2	2	12	16
<i>Chief designer/ Area chief designer/ Designer</i>		14	12	26
<i>Construction/ erection management/ supervision</i>	2	1	4	7
<i>Administrative and supportive activities</i>	2	4		6
<i>Count:</i>	6	21	28	<u>55</u>

## 5.2. Questionnaire

The basic outline or structure of the questionnaire is adopted from Juholin (1999) who used a modified version of Wiio's OCD2 questionnaire with 123 questions. The questionnaire of this study has 93 questions. In both questionnaires the questions can be classified into five categories. In Juholin's (1999, 84) case the categories are (1) overall satisfaction with communication, (2) shortcomings of communication, (3) channel gaps (4) information gaps and (5) overall satisfaction with work. In the questionnaire of this study the parts are named:

**A** - Satisfaction with the communication of the project PM,

**B** - Main shortcomings in the communication of the project PM

**C&D** - Information received and desired from the channels

**E&F** - Information received and desired about the issues in the project PM

**G** - The successful and not so successful aspects of the communication of the project PM.

The questionnaires were sent to the chosen sample in April. Few weeks before sending the questionnaire, the project manager of the consultant contacted by phone the corresponding project managers or other key persons in each organisation to be included in the research. The

project manager informed the contact person about the research to be conducted and asked for participation. It was agreed upon that the contact person would receive the questionnaires, distribute them and make sure that they were returned within agreed timeframe. The number of questionnaires to be sent was also agreed upon. It was hoped that the personal contact would commit the people to take part in the study. The questionnaires were sent to each organisation with a cover letter assigned to the contact person (see appendix Cover letter). Each questionnaire (see appendix Questionnaire) had its own individual motivation letter attached (see appendix Motivation letter).

## **Part A**

The structure of the part A of the questionnaire was based on the CSQ. CSQ or the communication satisfaction questionnaire was developed by Downs and Hazen (1994, 114-119) in 1977, in an attempt to discover the relationship between communication and job satisfaction. Since then, the instrument has been used in over 30 studies and it has been translated into several languages. The CSQ's reliability and validity have been established in various studies (see e.g. Downs 1979, Pincus 1986, Taylor 1997). The CSQ is based on the eight original dimensions created by Downs. The questionnaire contains five items per dimension. The items are used with a Likert-type scale ranging from very satisfied (1) to very dissatisfied (7). Later on three new items were attached to the original questionnaire. Two of the additional items deal with job satisfaction. The third one is an open-ended question about the organisation communication and what the respondent would change in it in order to improve their satisfaction.

The adopted version of CSQ that was used in this thesis as part A of the questionnaire was less comprehensive than the original one. The original CSQ has 43 items. In the adopted version the questions about job satisfaction were left out and the structure was simplified to include a total of 29 statements. Wording of some of the statements was adapted to the project context. The statements of part A fall into three categories suggested by Pincus (1986). The categories are: (1) Informational dimensions, (2) Relational dimensions and (3) Informational/relational dimensions. Also the ninth dimension of satisfaction with top management was included in the statements. Formal communication was also handled in parts C – F of the questionnaire so the emphasis was on the other categories in part A.

The statements of part A that fall into the category of *Informational dimensions* were:

- A1 Formal communication of the project
- A2 The way the meetings of the project are organised
- A3 Quality of the written directives and reports of the project
- A4 Information about how the problems in your job are being handled
- A6 Information you receive about the requirements of your job
- A10 Information about how your job compares with others

The statements of part A that fall into the category of *Relational dimensions* were:

- A7 Informal communication in the project organisation
- A8 Interaction with the other members of the project organisation
- A9 Communication of your work group
- A11 Information you receive from the top management of the project
- A12 Communication practices of the top management of the project
- A25 Your subordinates responsiveness to directive communication
- A26 The way your subordinates anticipate your needs for information
- A27 Amount of information you receive
- A28 Your subordinates when it comes to their receptiveness to evaluation, suggestions and criticism
- A29 Amount of initiatives your subordinates take to communicate

The statements of part A that fall into the category of *Informational/relational dimensions* were:

- A5 How motivating the communication of the project is
- A13 Information you have been given about your progress in your work
- A14 Your supervisor's level of knowledge and understanding of the problems that you face
- A15 Communication of your supervisor
- A16 Level of trust you share with your supervisor
- A17 Guidance your supervisor offers for solving job-related problems
- A18 Your supervision
- A19 Information about you are being judged
- A20 Recognition you receive from your efforts
- A21 Project organisations members abilities as communicators
- A22 Attitudes towards communication in the project
- A23 Timeliness of information
- A24 Appropriateness of handling the conflicts through the proper communication channels

## **Part B**

The structure of part B was partially adopted from similar part Juholin (1999, 84) used in the research OCD2. The form of the statements was slightly changed and adjusted to fit the particular case of project organisation. The project manager of the consultant gave valuable assistance in forming the part B.

The objective part B was to detect possible problems in the communication that might not come up otherwise. The information that part B provides may also be used to back up the information gained from part A and parts C – F. The statements have quite negative undertone in order to provoke strong answers from the respondents. The respondents were asked to evaluate each statement with a seven-point Likert scale that ranged from “strongly agree” to “strongly disagree”. The statements of part B were:

- B1 Information is not easily available.
- B2 The responses I get for the information I give are not sufficient.
- B3 Information I receive is out of date.
- B4 It is difficult to work in a foreign language.
- B5 Information comes as a rumour.
- B6 Information I receive is inaccurate.
- B7 Information I receive is useless.
- B8 I cannot freely express my opinions.
- B9 Language used in communication is difficult.
- B10 My opinion is not heard.
- B11 I receive too much information.
- B12 Information does not reach me.
- B13 Management does not tell about important issues.
- B14 Management does not know what others think.
- B15 I do not receive enough feedback.

## **Parts C&D**

A channel gap refers to the difference between information received and information expected from a certain channel by a member of an organisation. For interpreting the channel gaps there is a practical, experience-based guideline. When the gaps are larger than 1.00 they are large enough to examine and plan how to decrease them. Gaps smaller than 0.5 do not cause

any particular harm in an organisation. Moderate negative gaps do not necessarily mean that there is an information overload. Still, if the negative gaps reach more than  $-1.00$ , there is a reason to consider whether all the information is really needed by all individuals. (Juholin 1999, 92.)

The objective of the parts C and D was to find out if there were notable information gaps in the communication of PM. The channels of part C and D were chosen together with the project manager of the consultant. The decision was done on the basis of typical channels in organisations. Some channels were excluded as they did not apply to the project.

In part C the respondents were asked to evaluate the amount of information they receive from each channel with the five-point scale ranging from “very little information” to “a lot of information”. In case the respondent did not receive any information from the given channels, he/she was asked to tick 6. In part D the respondents were asked to evaluate the amount of information they would like to receive from each of the channels with the same scale than in part C. In the respondent did not wish to receive information from the given channel, he/she was asked to tick 6.

The channels were: immediate supervisor, other supervisors/ management, co-workers in the project, internal project newsletters/memos, project meetings/negotiations, project contract negotiations, project briefings, E-mail, project team meetings and project management briefings.

## **Parts E&F**

*Information gap* refers to the difference between information desired and received on certain issues. The objective of the parts E and F was to find out if there were any notable information gaps in the communication of PM. The function of the information provided by the parts E and F was to supplement the results of the parts C and D.

In part E the respondents were asked to evaluate the amount of information they receive about the issues related to the project with the five-point scale ranging from “very little information” to “ a lot of information”. In case the respondent did not receive any information about a given topic, he/she was asked to tick 6. In part F the respondents were requested to evaluate the amount of information they would like to receive about the issues related to the project



with the scale used in part F. If the respondent did not wish to receive any information about a given topic, he/she was requested to tick 6.

The topic areas for parts E and F were created in co-operation with the project management of the consultant. The issues chosen were: your own work, changes in production and work methods, training and courses, social activities, project products and services, organisational changes in the project, project plans and targets, plans and targets of your project team, customer expectations, topic issues of your project discipline, plans and targets of other project disciplines, drawbacks and accomplishments in the project and external factors that affect the project.

### **Part G**

The aim of part G was to gather more detailed information about what was successful and what was not so successful in the communication in PM. The main shortcomings were already handled in part B. In part G the respondents had the chance to express their ideas about the communication of PM, give direct feedback about the positive and negative issues and to do that anonymously. Also suggestions for improving the communication were requested from the respondents.

The part G had three open-ended questions. The first was: “In your opinion, what has been successful in the communication in this project PM?” The second question was: “In your opinion, what has been not so successful or has even caused inconvenience to your work in the communication in this project PM?” The third question was: “How would you improve the communication practices in the project PM?”

In the end of the questionnaire there was a small additional part requesting respondents to give feedback about the questionnaire. This part had two objectives: to receive feedback about the functionality of the questionnaire and to obtain information about the attitudes towards the importance of communication. The last two statements of the part were “I think the project PM has been successful” and “I think the communication of PM has been successful.” The respondents were asked to evaluate the statements with a seven-point Likert scale ranging from “strongly agree” to “strongly disagree”.

### 5.3. Interview

The second research method was a semi-structured interview. An interview gives versatile and thorough data about the research topic. An interview as a method gives the interviewer more room to specify and clarify interesting topics and also in the case of intercultural communication, to make sure that the respondent understands the questions and the objectives of the research. The interview should be quite structured, in my opinion, because it guarantees that the interviews are valid. The structured interview should also ease the job of the interviewer in the intercultural interviews.

The working language of the project was English so it was assumed that all the key informants as the respondents chosen to be interviewed were referred to, had a good knowledge of English. All the interviewees were in such position in the project their language skills needed to be excellent. The interviews were conducted in English with the Portuguese and the German respondents and in Finnish with the Finnish respondents. Naturally this put the respondents in different position to some extent, but it would have been odd not to use a native language when it was possible.

The rough outline for some of the questions, more precisely the questions about the channels efficiency, day-to-day communications and effectiveness were adopted from Downs (1988, 52 – 53). The rest of the questions were created on the bases of the topic areas for this particular interview guide. After forming the basic structure of the interview and the topic areas, the questions were further developed with the project manager of the consultant.

The first question was a general inquiry to the background information of the interviewee, asking about the organisation, the nationality and the discipline of the interviewee. The second question was aimed to give the interviewer a better picture of the structure of the project and its lines of communication. The question required information about the respondents' position, responsibilities and regular communication partners. The very first questions also functioned as a kind of warm-up. All the interviews started with a short chat about the research and its objectives in a more general level and with explanations of how the interview should go time-wise.

The topic areas of the interviews that supplemented the information received from the questionnaires were the *Channels efficiency* and *Successful and not so successful aspects of*

*communication*. The questions six, seven and eight of the interview handled the issues of channel efficiency. The questions were more specifically about the formal channels and their functioning and about the informal channels and their functioning. In addition, the interviewees were also asked to rate the channels, to name the best channel(s) and their preference of the channels. The objective of these questions was to give more detailed information about the channels and their functioning to verify the result of the questionnaire as well as to clarify and explain the quantitative results.

The questions ten and eleven dealt with the successful and not so successful aspects of communication in the project. The interviewees were asked about the positive and negative factors of the communication practices and ideas or suggestions for improving the communication. The questions were similar to the ones that had been in the questionnaire. The function of these questions was to give the respondents a chance to clarify their ideas and thus get more detailed information about the level successfulness of the communication from the experts – the project organisation members themselves.

The topic areas of the interviews that were designed to give new information in addition to the information received with the questionnaire were *Multiculturalism* and *Day-to-day communications*. The last main topic area of the interview and the research was *Effectiveness*. Some aspects of effectiveness were dealt with in the questionnaire. In the interviews the aspects handled were quite different, covering issues such as conflict solving, communication climate, motivation, management communication and instructions for communication. In addition, the interviewees were asked to define effective communication in the context of project. One of the objectives of the research was to evaluate the effectiveness of the communication of the project. Effectiveness was operationalised to include the level of communication satisfaction, efficiency of channels and the factors that were covered in the interviews. A complete valuation of effectiveness of communication in the project takes into account various aspects of communication.

Multiculturalism was handled in the question number 5 of the interview guide. The first part of the question focused in the relationships between the different parties of the project and the second part more closely on the multiculturalism of the project. First the interviewees were asked to describe the communication and the relation between

- The client and the consultant
- The client and the supplier(s)
- The consultant and the supplier(s)

The discussion handled the issue both on general level as well as on a more particular level. In addition, the effect of various organisations being present in the project was discussed. The issue of multiculturalism received a lot of attention. The interviewees were encouraged to reflect on their experiences in the project and to analyse the impact of cultures to the work in this particular case. Multiculturalism and all the issues surrounding it received a lot of attention in the interviews as it is one of the main themes of the entire research. The questions regarding cultures were left relatively open because it left more space to open discussion during the interviews. Very structured questions might have inhibited the interviewees from exploring their experiences. The open structure of the interview also allowed the interviewer to pursue interesting topics and ideas to more detail at any phase of the interview. The open structure gave more space for the interviewer to manoeuvre in the situation.

The day-to-day communication of the project was dealt with in questions three, four, nine and seventeen. The rough outline of the questions was adapted from Downs (1988, 52 – 53). In question three, the interviewees were asked to describe the decision-making processes in the project, what kind of decision they made and how did they get the information needed for the decision. Because the line of work in question is based on expertise and on planning and designing it was thought that decision-making is a basic element of work. When things are being planned, designed and implemented and the whole business of it is managed and controlled, decisions have to be made.

In question four the interviewees were asked to describe the everyday communication of the project, their daily routines and contacts, their needs for information etc. This question was designed to give an overall picture of the daily happenings of the project organisation. The question nine handled the issue of communication patterns and the possible changes in it during the project. In projects there is a beginning and an ending, and in between there are various phases and stages. These stages do affect the work and the activities of many project organisation members, but does it affect the communication practices? If it does, this should be a particular feature of a project organisation. In question 17 the respondents were asked to ponder the differences between static organisations and project organisations. Basically all the interviewees belonged or at least had belonged to a static organisation in addition to the project organisation. It was thought that by separating these two types of organisations, the specific features of a project organisation and its communication would be more clearly distinguished.

The interviews lasted from 35 minutes to almost two hours each. The interview guide (see appendix Interview guide) was followed relatively loosely, giving time to issues the interviewee perceived important and was more talkative about. All the interviewees received the same guide regardless of the language used in the interview. The interviewees were given the guide only in the beginning of the interview to have the general idea about the issues to be handled. In the beginning of the interview some time was given to discuss the research, its objectives and the purpose of the interview. The interviews were somewhat open, not structured discussions about the topic areas, the interviewer only guiding the direction of the speech. The fact that the researcher was already acquainted with most of the interviewees helped creating the climate of the interview open and informal and facilitated the interviews that were intercultural. The researcher had been involved in the seminars organised in the preliminary phase of the project and had since met many of the project organisation members in more social gatherings. In this case and with multiple cultures involved, the fact that the researcher was somewhat familiar with the project organisation and its people was an advantage to the researcher. Especially in the case of the interviews with the Portuguese informants knowing the person and where they come from is a great advantage in breaking the ice of the social interaction.

#### **5.4. Analysis of the data**

The study was divided to two parts, the first part were the questionnaires and the second the interviews. The questionnaires were prepared prior to the interview guide. After the questionnaires were returned and first analysis was conducted, the interview guide was finalised. The methods were chosen to supplement each other so it was necessary to see first what information was gained with a first method so the second method could fill in the possible blanks that had come up in addition to gathering new information.

The data of the questionnaires was decoded in excel. A simplistic statistical analysis was conducted calculating the *mean*, the *mode*, the *median*, the *standard deviation* and the *variance* of the answers. In addition since quite a few questionnaires were returned half completed, a *count* of answers to each question was also taken. Also the *distribution of answers to each alternative* was calculated and transferred to percentages.

Results of part A were further divided under three titles: Informational dimensions, Relational dimensions and Informational/ Relational dimensions. Channel gaps and information gaps of

parts C, D, E and F were calculated by subtracting the mean of received amount of information from the mean of the desired amount of information.

The respondents of the interview were divided into four subgroups. The answering percentage was so low that it limited the possibilities of forming many subgroups. The results of the subgroups are handled in the chapter handling results if the results of the subgroup were somehow exceptional or very different from the general line of answering. The subgroups are: *Finnish*, *Other nationalities*, *Main engineering consultant* and *Other organisations*. The number of respondents in each group is: 30 in Finnish, 26 in Other nationalities, 21 in Main engineering consultant and 35 in Other organisations.

The interview data was transcribed. The interviews were carefully read and analysed first as individual answers reflecting personal interests and concerns. At this point the interviews were also analysed from the cultural point of view, reflecting on the concepts introduced in the conceptual basis, theories of cultural variability, self-construals and identity. Then the information of the interviews was grouped under titles Channels efficiency (questions 6, 7 and 8), Feedback about successful and not so successful aspects of communication (questions 10 and 11), Organisations and cultures (question 5), General effectiveness (questions 12, 13, 14, 15 and 16) and Day-to-day communications (questions 3, 4, 9 and 17). The interviewees were not grouped in any way.

The answers under the title Channels efficiency dealt with formal and informal channels. The interviewees were also asked to name the channel or channels that had worked best in their opinion. The answers grouped in the Feedback category dealt with positive and negative aspects of the communication in the project. Interviewees were also asked to suggest improvements to the communication practices. Organisations and cultures is a category for answers dealing with the effects of multiculturalism and multiple organisations in the project. Under the title General effectiveness were grouped several issues that affect effectiveness as conflict, climate, motivation, evaluations of management and instructions about communication. The interviewees were also required to give a definition of effective communication in a project. In the Day-to-day communications category are answers that describe the communication in projects and in the project PM in particular. The issues handled were decision-making, day-to-day communication practices, changes in communication and the difference between project organisation and a static organisation.

Even though the study is basically a multicultural one in stead of being intercultural in a sense that two or more cultures were studied separately, the study has some intercultural aspects. In this case the subject of the study is an organisation and its members who happen to have different nationalities. Not undermining the effect of cultures, it should be noted that all the respondents do work on the same field so most of them do have many things in common, starting from the specific jargon of technical specifics and details related to paper machines.

In the study of intercultural communication the results should be viewed from the context of the studied culture. At its best the study of intercultural communication enhances the understanding of both of the cultures studied. In every culture some things are taken for granted. Often these things have to do with communication and interaction. Sometimes it takes an outsider to point out which these things are. (Johnson & Tuttle 1989, 478 – 479.) Even though no outsider help was available for the analysis of the results, the fact that the researcher was personally familiar to two of the cultures involved and to the project organisation proved to be useful in understanding the interviewees and in analysing the results.

When a researcher decides to study a culture to which he or she has not been socialised to, there is danger of misinterpreting the communication processes and the factors that have an effect on these processes. Since theoretical conceptualisations and variables of the research are valued differently in different cultures, one cannot generalise results of one research done in one particular culture to a universal law (Johnson & Tuttle 1989, 468). The phenomena studied do not necessarily exist in all cultures or they may not be comparable. Theories are based on abstract concepts, whose meanings vary from culture to culture, e.g. all Western concepts or words do not exist in non-western cultures and vice versa. (Ito 1989, 173.)

In the next chapter the results of the questionnaires and the interviews are discussed together under eight topics that relate to the research questions presented in chapter 5. The research questions dealt with six issues: (1) communication satisfaction, (2) main shortcomings in information flow, (3) channels efficiency, (4) successful and not so successful aspects of communication, (5) multiculturalism and (6) effectiveness. In addition, one objective of the study is to describe the day-to-day communications of the project.

## 6. RESULTS

### 6.1. Communication satisfaction

The part A of the questionnaire dealt with communication satisfaction. The results are grouped under the three dimensions of communication satisfaction: the informational dimensions of communication satisfaction, the relational dimensions of communication satisfaction and the informational/ relational dimensions of communication satisfaction.

The statistical analysis included the mean, the mode, the median, the standard deviation and the variance of each answer. The count, the number of answers given to the statement was also calculated. The smaller the mean, the more satisfied the respondents were.

**Table 6.1.1. Results of the informational dimensions of communication satisfaction**

Statement	mean	mode	median	standard deviation	variance	count
A1 Formal communication of the project	2.56	2	2	1.09	1.19	55
A2 The way the meetings of the project are organised	3.02	2	3	1.32	1.75	53
A3 Quality of the written directives and reports of the project	2.98	2	3	1.27	1.62	56
A4 Information about how the problems in your job are being handled	2.98	2	3	1.36	1.84	55
A6 Information you receive about the requirements of your job	2.81	2	3	1.29	1.66	53
A10 Information about how your job compares with others	3.17	3	3	1.31	1.73	53

*The table presents the results of the statistical analysis including the mean, the mode, the median, the standard deviation and the variance of each answer. The count, the number of answers given to the statement is also given. The smaller the mean, the more satisfied the respondents were. The scale to evaluate the satisfaction ranged from 1 – very satisfied to 7 – very dissatisfied.*

From the informational dimensions of communication satisfaction, the respondents were most satisfied with A1, *Formal communication of the project* with the mean of 2.56 and with A6, *Information received about the job requirements*, which mean was 2.81. The scale to evaluate the level of satisfaction ranged from 1 – very satisfied to 7 – very dissatisfied. From the informational dimension, the respondents were least satisfied with A10, *Information about*



*how one's job compares with others* that received a mean of 3.17. All the scores were positive meaning that the means were small indicating satisfaction.

**Table 6.1.2. Results of the relational dimensions of communication satisfaction**

Statement	mean	mode	median	Standard deviation	variance	count
A7 Informal communication in the project organisation	2.44	2	2	1.11	1.23	55
A8 Interaction with the other members of the project organisation	2.69	2	2	1.37	1.89	55
A9 Communication of your work group	2.36	2	2	1.13	1.29	53
A11 Information you receive from the top management of the project	3.15	2	3	1.47	2.16	55
A12 Communication practices of the top management of the project	3.13	3	3	1.39	1.93	53
A25 Your subordinates responsiveness to directive communication	2.27	2	2	0.75	0.56	22
A26 The way your subordinates anticipate your needs for information	2.55	3	2.5	0.99	0.98	22
A27 Amount of information you receive	2.59	2	2	0.98	0.97	22
A28 Your subordinates when it comes to their receptiveness to evaluation, suggestions and criticism	2.62	2	3	0.95	0.9	21
A29 Amount of initiatives your subordinates take to communicate	2.82	2	2.5	1.03	1.06	22

*The table presents the results of the statistical analysis including the mean, the mode, the median, the standard deviation and the variance of each answer. The count, the number of answers given to the statement is also given. The smaller the mean, the more satisfied the respondents were. The scale to evaluate the satisfaction ranged from 1 – very satisfied to 7 – very dissatisfied.*

In comparison to the informational dimensions, the relational dimensions received lower means indicating that the respondents were more satisfied with them than with the informational dimensions. Statements A25 – A29 are quite comparable to the others because these statements were directed to only those respondents who had subordinates. 22 respondents were in a superior position. Still, those statements regarding the communication of the subordinates, the levels of satisfaction were all high and the standard deviation and the variance were lower than in other statements. When all the respondents are included, the A7, *Informal communication in the project organisation* was the issue the respondents were most

satisfied with, the mean was 2.44. The least satisfied item with the mean of 3.36 was *Communication of one's work group*.

**Table 6.1.3. Results of the informational/relational dimension of communication satisfaction**

Statement	mean	mode	median	standard deviation	variance	count
A5 How motivating the communication of the project is	2.91	2	3	1.23	1.5	55
A13 Information you have been given about your progress in your work	3	2	3	1.43	2.04	53
A14 Your supervisor's level of knowledge and understanding of the problems that you face	2.64	2	2	1.36	1.85	53
A15 Communication of your supervisor	2.56	2	2	1.17	1.36	52
A16 Level of trust you share with your supervisor	2.29	2	2	1.1	1.21	52
A17 Guidance your supervisor offers for solving job-related problems	2.65	2	2	1.39	1.92	52
A18 Your supervision	2.75	2	3	1.13	1.28	53
A19 Information about how you are being judged	3.35	3	3	1.44	2.07	51
A20 Recognition you receive from your efforts	3.27	3	3	1.55	2.39	52
A21 Project organisations members abilities as communicators	2.91	3	3	0.95	0.9	54
A22 Attitudes towards communication in the project	2.98	3	3	1.13	1.27	51
A23 Timeliness of information	3.11	3	3	1.16	1.35	53
A24 Appropriateness of handling the conflicts through the proper communication channels	2.82	3	3	1.03	1.07	50

*The table presents the results of the statistical analysis including the mean, the mode, the median, the standard deviation and the variance of each answer. The count, the number of answers given to the statement is also given. The smaller the mean, the more satisfied the respondents were. The scale to evaluate the satisfaction ranged from 1 – very satisfied to 7 – very dissatisfied.*

From the informational/ relational dimensions A16, *Level of trust shared with the supervisor* with the mean 2.29 and A15, *Communication of supervisor*, with the mean 2.56, received the lowest means indicating the highest levels of satisfaction. Also other statements dealing with supervisor communication good positive results, the respondents were satisfied with them. The issues that were least satisfied with were A19 *Information about how one is being judged*, mean 3.35 and A20 *Recognition received from efforts*, mean 3.27.

All in all the respondents were most satisfied with the relational dimensions of communication satisfaction with the mean of 2.66. The differences to other dimensions were

not very great, informational/relational dimensions the overall mean was 2.87 and the mean of informational dimensions was 2.92. From the subgroups, the Finns were less satisfied compared to other nationalities. They were particularly unsatisfied with the informational dimensions. The other nationalities were unsatisfied with informational/relational dimensions especially with issues dealing with feedback.

## 6.2. Main shortcomings in information flow

The part B of the questionnaire dealt with shortcomings in information flow.

**Table 6.2.1. The main shortcomings in information flow in a rank order**

Shortcoming	mean	mode	median	standard deviation	variance	count
Information is not easily available	4.49	6	5	1.48	2.18	55
I do not receive enough feedback	4.74	6	5	1.52	2.3	54
Management does not know what others think	4.93	6	5.5	1.57	2.48	54
Information I receive is out of date	4.96	6	5	1.46	2.14	55
The responses I get for the information I give are not sufficient	4.98	6	5	1.29	1.67	51
Management does not tell about important issues	5.19	6	6	1.42	2	54
Information does not reach me	5.24	6	6	1.32	1.74	54
Information I receive is inaccurate	5.28	6	6	1.11	1.24	54
Information I receive is useless	5.38	6	6	1.58	2.49	55
I receive too much information	5.45	6	6	1.35	1.81	55
I cannot freely express my opinions.	5.52	6	6	1.46	2.14	54
My opinion is not heard	5.54	6	6	1.38	1.9	52
Information comes as a rumour	5.67	6	6	1.41	2	54
It is difficult to work in a foreign language	5.69	6	6	1.14	1.3	55
Language used in communication is difficult	5.84	6	6	1.07	1.16	55

*The table presents the results of the statistical analysis including the mean, the mode, the median, the standard deviation and the variance of each answer. The count, the number of answers given to the statement is also given. The smaller the mean, the greater shortcoming is. The statements are presented in a rank order starting with the greatest shortcoming. The respondents evaluated the statements with a scale that ranged from 1 – strongly agree to 7 – strongly disagree.*

The respondents evaluated each shortcoming with a scale ranging from 1 – strongly agree to 7 – strongly disagree. The evaluations were very positive in the sense that the average of the answers did not indicate agreement to any of the statements, the lowest mean was 4.49

(*Information is not easily available*) and the highest, indicating the strongest disagreement was 5.84 (*Language used in the communication is difficult*).

The rankings of the subgroups were slightly different compared to general line of answers. The results of the subgroups are presented in the below table in the rank of order of the total group in order to compare means of the answers of the subgroups. The ranking of the statement is marked in brackets after the mean. The subgroup of *Other nationalities* differs most from the whole group. The shortcoming of not receiving enough feedback that scored high in all the other groups and in the whole group only made it to the seventh place in the *Other nationalities* –subgroup.

**Table 6.2.2. The main shortcomings in information flow of the subgroups in rank order**

rank order	Shortcoming	all	Finns	other nat.	consultant	other org.
1	Information is not easily available	4.49	4.25 (1.)	4.77 (1.)	4 (1.)	4.77 (1.)
2	I do not receive enough feedback	4.74	4.31 (2.)	5.24 (7.)	4.4 (2.)	4.94 (2.)
3	Management does not know what others think	4.93	4.79 (4.)	5.08 (3.)	4.9 (4.)	4.94 (2.)
4	Information I receive is out of date	4.96	4.9 (5.)	5.04 (2.)	4.95 (5.)	4.97 (3.)
5	The responses I get for the information I give are not sufficient	4.98	4.77 (3.)	5.2 (5.)	4.67 (3.)	5.15 (4.)
6	Management does not tell about important issues	5.19	5.03 (6.)	5.36 (9.)	5.1 (7.)	5.24 (6.)
7	Information does not reach me	5.24	5.21 (8.)	5.27 (8.)	5.25 (8.)	5.24 (6.)
8	Information I receive is inaccurate	5.28	5.07 (7.)	5.5 (11.)	5.05 (6.)	5.41 (9.)
9	Information I receive is useless	5.38	5.55(10.)	5.19 (4.)	5.65(12.)	5.23 (5.)
10	I receive too much information	5.45	5.6 (12.)	5.27 (8.)	5.6 (11.)	5.37 (7.)
11	I cannot freely express my opinions.	5.52	5.57(11.)	5.46(10.)	5.35(10.)	5.6 (10.)
12	My opinion is not heard	5.54	5.82(13.)	5.21 (6.)	5.8 (14.)	5.38 (8.)
13	Information comes as a rumour	5.67	5.38 (9.)	6 (14.)	5.3 (9.)	5.9 (13.)
14	It is difficult to work in a foreign language	5.69	5.83(14.)	5.54(12.)	5.7 (13.)	5.7 (11.)
15	Language used in communication is difficult	5.84	5.83(14.)	5.9 (13.)	5.8 (14.)	5.86(12.)

*The table presents the mean of the whole group (all in the table), results of which were presented in more detail in Table 6.2.1, and the means of all the subgroups divided by nationality to Finns and Other nationalities and by organisation to Consultant and Other organisations. The results of the entire group are presented in rank order starting from the greatest shortcoming. The ranking of the statement in each subgroup is marked in brackets after the mean. The respondents evaluated the shortcomings with a scale that ranged from 1 – strongly agree to 7 –strongly disagree.*

### 6.3. Channels efficiency

Channels efficiency was one topic of both the questionnaire and the interview guide. The channel gaps were handled in the parts C and D in the questionnaire and the related issue, information gaps in parts E and F. In the interviews the channels were divided into formal and informal channels. The interviewees were asked how the channels worked, which were the best channels at keeping them informed and if they would prefer some other channels than the ones they had available.

The channel gaps are presented in the table 6.3.1 in the rank order starting from the largest gap. A channel gap refers to the problem of a channel not providing as much information as it would be desired. According to the guideline (see e.g. Juholin 1999, 92) gaps larger than 1.00 are large enough to examine and plan how to decrease them. If the gap of the channel reaches 1.00 or more, the channel is not functioning the way it should. Gaps smaller than 0.5 do not cause any particular harm in the organisation because the difference between the amount of information received and the amount of information desired from the channel is not so grand that it would affect the work.

**Table 6.3.1. Channel gaps**

rank order	Channel	all	Finns	other nat.	consultant	other org.
1	Project contract negotiations	0.79	0.83 (1.)	0.74 (3.)	1.15 (1.)	0.55 (5.)
2	Co-workers in the project	0.73	0.69 (3.)	0.75 (2.)	0.71 (2.)	0.74 (3.)
3	Internal project newsletters/memos	0.72	0.7 (2.)	0.75 (2.)	0.6 (4.)	0.81 (1.)
4	Project briefings	0.69	0.52 (5.)	0.86 (1.)	0.54 (5.)	0.78 (2.)
5	Other supervisors/management	0.53	0.42 (8.)	0.66 (4.)	0.65 (3.)	0.45 (8.)
6	Project team meetings	0.5	0.53 (4.)	0.48 (6.)	0.27 (8.)	0.64 (4.)
7	Project meetings/negotiations	0.48	0.51 (6.)	0.43 (8.)	0.39 (6.)	0.53 (6.)
8	Project management briefings	0.45	0.48 (7.)	0.46 (7.)	0.6 (4.)	0.38 (9.)
9	Immediate supervisor	0.4	0.31 (9.)	0.51 (5.)	0.31 (7.)	0.46 (7.)
10	E-mail	0.22	0.3 (10.)	0.12 (9.)	0.06 (9.)	0.3 (10.)

*The table presents the channel gaps of the whole group (all in the table) and the channel gaps of all the subgroups divided by nationality to Finns and Other nationalities and by organisation to Consultant and Other organisations. The results of the entire group are presented in rank order starting from the largest channel gap. The ranking of the channel gap in each subgroup is marked in brackets after the mean. Gaps larger than 1.00 are significant and gaps smaller than 0.5 do not cause any particular harm in an organisation.*

There were no negative gaps in the data. Negative gaps indicate to excess information from the channel. None of the channels gaps was larger than 1.00. Only in the subgroup of *Consultant* there was a significant gap of 1.15 in the channel of project contract negotiations. In the whole group six channels had gaps of 0.5 or larger: project contract negotiations, co-workers in the project, internal project newsletters/ memos, project briefings, other supervisors/ management and project team meetings. In the subgroups there was slight variance in the rankings compared to the whole group. For the subgroups of *Finns* and *Other organisations* the channel of other supervisors/ management was not problematic but in turn the channel of project meetings/ negotiations had a gap larger than 0.5. For *Other nationalities* the channel of immediate supervisor had a gap of 0.51.

The information gaps are presented in the table 6.3.2. in the rank order starting from the largest gap. An information gap refers to the problem of not receiving as much information of a certain issue as desired. Gaps larger than 1.0 in information distribution are significant. Gaps smaller than 0.5 do not cause any particular harm in the organisation because the difference between the amount of information received and the amount of information desired of an issue is not so grand that it would have any consequences.

In whole group there were three significant gaps in the issues: external factors that affect the project (1.12), training and courses (1.05) and plans and targets of other project disciplines (1.00). In the whole group all but one of the issues had information gaps larger than 0.5. The issue that had the smallest gap, topic issues of your project discipline had a gap of 0.49. In the subgroup of *Finns* there was only one significant information gap in the issue of external factors that affect the project. The subgroups of *Finns* and *Consultant* had the smaller gaps compared to the other subgroups. In both groups three issues that had no gaps, the difference remained under 0.5. The issues differed though, the least problematic issues to *Finns* were project plans and targets, plans and targets of your project team and issues of your project discipline whereas the issues the *Consultant* was best informed about were social activities, organisational changes in the project and topic issues of your project discipline.

The subgroups of *Other nationalities* and *Other organisations* were clearly in a poorer position in information distribution than the other two subgroups. *Other organisations* – subgroup had five significant information gaps in following issues: external factors that affect the project, training and courses, plans and targets of other project disciplines, social activities and organisational changes in the project. The subgroup had altogether seven information

gaps that were the same than of *Other nationalities* and two more: project products and services and project plans and targets. The information gaps of the subgroups of Other nationalities and Other organisations were large, e.g. the biggest information gap (social activities) was 1.4.

**Table 6.3.2. Information gaps**

rank order	Issue	all	Finns	other nat.	consultant	other org.
1	External factors that affect the project	1.12	1.08 (1.)	1.19 (3.)	0.95 (3.)	1.24 (2.)
2	Training and courses	1.05	0.89 (3.)	1.29 (2.)	1.01 (1.)	1.07 (4.)
3	Plans and targets of other project disciplines	1	0.93 (2.)	1.11 (4.)	1 (2.)	1.03 (5.)
4	Social activities	0.9	0.58 (8.)	1.4 (1.)	0.29(13.)	1.4 (1.)
5	Organisational changes in the project	0.87	0.74 (5.)	1.06 (6.)	0.46(11.)	1.12 (3.)
6	Changes in production and work methods	0.82	0.77 (4.)	0.89(10.)	0.72 (9.)	0.89 (6.)
7	Drawbacks and accomplishments in the project	0.81	0.74 (5.)	0.9 (9.)	0.91 (4.)	0.76 (7.)
8	Project products and services	0.78	0.66 (7.)	1 (7.)	0.89 (5.)	0.75 (8.)
9	Project plans and targets	0.73	0.45(10.)	1.07 (5.)	0.87 (6.)	0.63 (9.)
10	Customer expectations	0.67	0.52 (9.)	0.87(11.)	0.8 (7.)	0.59(10.)
11	Your own work	0.6	0.71 (6.)	0.46(13.)	0.73 (8.)	0.51(11.)
12	Plans and targets of your project team	0.54	0.25(12.)	0.91 (8.)	0.68(10.)	0.44(12.)
13	Topic issues of your project discipline	0.49	0.33(11.)	0.71(12.)	0.45(12.)	0.51(11.)

*The table presents the information gaps of the whole group (all in the table) and the information gaps of all the subgroups, divided by nationality to Finns and Other nationalities and by organisation to Consultant and Other organisations. The results of the entire group are presented in rank order starting from the largest information gap. The ranking of the information gap in each subgroup is marked in brackets after the mean. Gaps larger than 1.00 are significant and gaps smaller than 0.5 do not cause any particular harm in an organisation.*

### **Formal and informal channels**

The communication of the project could be divided into internal and external, the internal referring to the communication that took place within the site organisation or within each of the organisations involved and external communication referring to the communication that took place between these different organisations or parties of the project: client, consultant and suppliers. As presented in the figure 1 in the Introduction the information circulates between the main parties: the site organisation, the consultants, the suppliers and contractors. The site organisation has the centre position in the information distribution.

In a project communication is basically formal only when it is on paper. Many of the interviewees emphasised this contract-based guideline of the external communication. All documents, especially drawings need to be sent as paper copies in addition to E-mail. The formality and the practices regarding information sending are important in projects in order to avoid claims. The fax is an important and a good channel in external communication because it leaves a document to both ends and it is also fast. The speed, the practicality and the easiness of the channel are important characteristics in the project context where time is such an issue and controlling factor. E-mail is becoming more and more important and was also a popular channel in PM.

For the project it is not so important how the information arrives but what is the quality of the information and whether it is on time. The problem is more likely to be the incomplete information, a drawing that is send unfinished in order to meet the deadline and that is then revised again and again than the functioning of a particular channel.

The choice of the channel depends on the information needed and the phase of the project. In the beginning of the project formality and forming relationships are important. Once the project matures, the atmosphere becomes more informal and the amount of direct contacts increases. In the later stages of the project the work load increases and the pace of work becomes hectic thus requiring fast decision-making. In internal communication the direct contacts, phone calls, personal E-mails or face-to-face contacts are the most usual way of dealing things. On the whole, informal and formal channels compliment each other. The information received is not that different between the channels according to the interviewees.

The meetings were mentioned by all of the interviewees and they seem to be one of the main formal channels in both internal and external communication. There are plenty of meetings in a project as there were in the project PM. There are regular meetings with all the main parties. Internal meetings took place on daily basis in the last phases of the project.

The informal channels were reported to have been active even though some respondents, mainly Portuguese claimed that the social side of the project was not as established as it could have been. The informal communication was more active within subgroups in the site organisation. The Portuguese pointed out the importance of chatting about matters that are not related to work before getting down to business. Socialising and getting to know people was



seen important in order to maintain good atmosphere, good relations between people and thus making the work more effective.

### **The best channels**

The best channels for information about the project were for all but one interviewee the informal channels, direct contacts to the key people. The key people were the immediate supervisors, project management or representatives of own organisation or a representative of the main engineering consultant. Direct contacts, phone calls or face-to-face conversations were seen as the fastest way of getting reliable information about the status of the project or about any specific issue. The nature of information needed guided the choice of the channel. The informal ways of getting information were also seen to be motivating to the employees by the supervisors. The nature of teamwork was emphasised. An interviewee presented an ideal of time wise effective communication in which the people know each other so well that things can be taken care of through informal direct contacts without the need for formal confirmations.

The site personnel were in the centre of things and thus their own observations of the status of the construction and thus the status of the project were also an important way of getting information. Few interviewees mentioned meetings and E-mail as one of the best channels of getting information. Meetings were viewed as important and effective channel to receive information but at the same time they were criticised for being too time consuming and detailed. Short 15-minute meetings on daily basis were seen as the best way of keeping everyone up-to-date on the project issues. These kinds of meetings were held in PM during the last stages of the project.

According to an interviewee, there is plenty of formal information available about the project since everything needs to be on paper but when some specific information is needed or information in general about the project or other disciplines is required people are more likely to contact their supervisors or talk to their colleagues directly. It seems that in a project there are no established or regular formal channels of the status of the project that would reach everyone automatically. For some the meetings are such a channel but for those who do not attend meetings there is no such formal channel and their level of being informed depends solely on their own interest and activity in asking for the information.

According to a Portuguese respondent the use of informal and formal channels also depends on the situation. When the situation is more critical or conflicting, there is a disagreement for example, the use of a formal channel is better and more effective because using it underlines the importance of the message. Direct informal contact is generally preferred because it is fast and also because it is more sociable.

#### **6.4. Successful and not so successful aspects of communication**

The successful and not so successful aspects of communication were dealt with in both the questionnaire, in part G and in the interviews. The results confirmed each other to a great extent. First the positive aspects are discussed, then negative and finally, the suggestions for improvements. The results of both methods are discussed together.

34 respondents answered to question G1, “In your opinion, what has been successful in the communication in this project PM?” Some of the respondents listed many things and these were treated as separate answers. The total of 53 answers was grouped to seven categories:

1. Communication channels
2. Personal relationships/ communication climate
3. Relationships between organisations
4. Quality of information
5. Project management
6. Language
7. Others

Altogether 19 answers were about the successfulness of the *communication channels*. Over half of these, ten answers handled the advantages of E-mail, five were about meetings, two about fax and two were about written directives. One was about internal project info and one was a general comment about the successfulness of the channels. 13 answers fell into the category *Personal relationships/ communication climate*. This category refers to interpersonal level of communication and to the communication climate of the project organisations. Answers in this category emphasised the informality of the communication in the project team, the team effort, good personal relationships, motivation of the project team members etc. 8 answers emphasised the goodness of the relationship and fluency of the communication between the different parties of the project. These form the category *Relationships between organisations*. 5 answers were categorised under the title *Quality of information*. The answers were general remarks about the fastness of information flow, the amount of information and

the easy access to information. Two answers complimented the management of the project. Two answers mentioned usage of English as a successful factor. The rest of the answers, a total of four answers were categorised as *Others*. These answers were about the specific personnel, organisational structure of the project and about the specific communication practices.

In five of the interviews the good climate or atmosphere of the project came up. Good relations between people and organisations, co-operative spirit even in conflict situations and the team spirit were mentioned as the positive aspects of the project. The fastness and easiness of the usage of E-mail, the easiness to contact people and good language skills were also among positive issues of the project. According to the interviewees the project was well prepared and the information was well distributed. Also some individuals were mentioned separately for their efforts and contribution. The experienced and competent people were mentioned as one of the main contributors of the success of the project. The fact that communication was never an issue in the project reflects the success of it.

36 respondents answered to question G2, “In your opinion, what has been not so successful or has even caused inconvenience to your work in the communication in this project PM?” Some of the respondents listed many things and these were treated as separate answers. The total 59 of answers were grouped to nine categories:

1. Quality of information
2. Relationships between organisations
3. Complexity of the project
4. Poor tools/ incompetence
5. Feedback
6. Distribution of information
7. Communication channels
8. Time schedule
9. Others

20 of the answers were categorised under the label *Quality of information*. The problems reported with quality of information were that the information came too late or too slowly, the information was not updated or reliable, there was too much information, the information was useless or there was not enough information available. 10 answers were about the organisational level relationships in the project. The complaints were mainly about the lack of communication between organisations. Nine answers dealt with issues related to the

complexity of the project. The different parties, various disciplines, the size of the project, the number of people involved are all making the project complex and thus it was hard for some respondents to create a complete picture of other disciplines and of the project as a whole. Some respondents felt that their discipline was not perceived as important as others. Five respondents complained about the lack of proper communication tools or other equipment needed to do their work. Lack of experience and competence in some participants was also reported. Four answers dealt with feedback, either there was too little of it, it came too late or there was not any. The feedback refers to responding to received information. Three answers complained about information distribution. Three answers were grouped under title communication channels. The complaints were about meetings: the time schedule was too tight, the meetings were not well organised or there were restrictions in who was allowed to attend certain meetings. Two answers dealt with time schedules.

In the interviews E-mail was mentioned as the most negative aspect by three of the respondents. The problems with E-mail were related to its apparent easiness that resulted in information floods and uncontrollability. E-mails are so easy to send, with a single press of a button you can send huge amounts of information to a lot of people. When the attached files are drawings, the sizes of E-mails grow quickly to be enormous. Also the information is not so well filtered and selected when it is sent via E-mail. While the actual problem might be just a little detail in a drawing, the whole drawing is sent as an attachment. Usually all work-related E-mails should be sent via the project mailbox thus enabling the project manager to keep on track on the mails and keeping the entire correspondence official. While E-mails are sent personally there is no way of checking them and so those E-mails are not official.

Another negative aspect related to E-mail is document handling. Two interviewees complained about the timeliness of sending documents and drawings via E-mail. As mentioned earlier, paper copies need to be sent of each drawing sent by E-mail. The problem is that the E-mails and drawings do not arrive at the same time and that there are sometimes delays in receiving the E-mails. These problems are more practical or technical by nature. Another problem are the incomplete drawings of which new revisions are sent one after another making the document distribution somewhat of a challenge.

Another negative aspects of the communication or issues affecting the communication that came up in the interviews dealt with co-ordination and tightness of time schedules, insufficient distribution of information, management related issues, language difficulties,

practical arrangements in work environment and the rush. The rush and the stress were reported to have affected the climate of the work place and the actual work. As a respondent stated:

We were too few people, we were always too busy, we never had time.. we were always attached to those agreement things, those things that must already be made yesterday.. we never had space and time for communication.

30 respondents replied to question G3, “How would you improve the communication practices in the project PM?” Some of the respondents listed many things and these were treated as separate answers. The total 42 of answers fell into eight categories:

1. Communication technology
2. Meetings
3. Additional information
4. Communication with suppliers
5. Feedback
6. Document distribution
7. Social activities
8. Others

Respondents wanted to improve the use of communication technology. Most answers dealt with E-mail, suggesting it should be used more actively and that all the technical documentation should be sent via E-mail. Other improvements included the use of videoconference, giving everyone a mobile phone in project organisation and distributing information in the local network. Eight answers were suggestions to improve meetings. For example, the respondents wanted more regular internal meetings that are well organised, well scheduled and not so time-consuming. It was suggested that regular briefings like the daily 15 minute meetings held during commissioning were also to be held during other stages of the project. Seven answers were requesting for more information on different areas of the project. More detailed, formal, written, regular information was requested about project decisions, progress of the project, project organisation, roles and responsibilities etc. Distribution of a regular newsletter was suggested. Six answers dealt specifically with communication with suppliers. It was suggested that suppliers had more meetings with other suppliers, that suppliers received more information from the PM project organisation, and that the information sent by the suppliers was better controlled. One suggestion dealt with giving the suppliers more detailed instructions about the information they were to give. Four answers dealt with feedback. The suggestions for improvements referred to firmness of answers and faster reacting to the received information. Three answers suggested improving the document

distribution practices by giving the work to specialised personnel. Two of the answers suggested that there should be more social activities in the project.

In the interviews most improvement suggestions about the communication were practically oriented suggestions of improving the meetings of the project. Most of the comments about meetings were about internal communication. The respondents recommended having more meetings, shorter and more regular meetings and more proper meetings. The use of videoconference was suggested for external meeting, to improve the communication between the site and the main consultant. Other improvements included the need for additional information. It seems that there are groups of people in the project that do not belong to the “inner circle” of information distribution so they are pretty much left out. Informing these people should be improved with regular distribution of written information on for example roles and responsibilities and of the project status. All the interviewees were in more or less centre position when it came to information distribution. Three of the interviewees would have wanted to improve the social aspect of the project. Forming relationships from the very beginning and social gatherings were seen as important tools in improving the working relations. E-mails should be better co-ordinated by directing all E-mails to the project mailbox. Communication with the suppliers should be improved by developing the programs and instructions they receive about the information delivery. Two of the interviewees expressed the need of better co-ordination of the work and practical suggestions in improving the tasks. For example a interviewee talked about document handling and distribution and suggested that there should be one experienced person co-ordinating the handling of documents and pre-arranging the distribution so the routines of the copying could be delegated to others.

## **6.5. Multiculturalism**

In the interviews the issue of cultures and multiculturalism at the work place and in the project was handled in the question 5. The interviewees were different to the extent how much experience they had of projects and working with members of other cultures and this was evident by the answers. The interviewees with least contacts with other cultures had most stereotyped ideas of other cultures and peoples and these stereotypes remained even though they had experienced working with a member of another culture in this project PM. On the other hand, the interviewees who were most experienced tended to understate the differences and their effect to communication. Basically the answers had two sides, similarity of cultures

and easiness of communication was emphasised and on the other hand several interviewees reported having noticed cultural differences and experienced critical incidents. Moreover, even though several differences between cultures were reported none of the interviews saw them as a problem. In the contrary, cultural diversity of the project was viewed as richness and a contributor to the work. As an interviewee stated:

It is good... and I find these differences funny because if we are always the same I think there is no "salt"...

Many of the interviewees emphasised the "Europeanness" and thus cultural similarity of the cultures involved in the project. All companies and organisations involved in the project were Europeans. Comparisons were made to Asian cultures, which were perceived to be more different and thus challenging. Some respondents had experience in working with Asians. For example an interviewee described his experiences with Asians:

It is sometimes very hard if you have to deal with organisations and also people from other cultures, especially from Asia...it is a another world sometimes, they betray you and they smile because they think in their culture it is OK to deal like this and you think they betray you...

Another factor that reduced the cultural differences or decreased their importance in the communication or in the relationships according to the respondents was the fact that all the people involved in the project had a common goal. The commitment to the project worked as a unifying element. Also the hectic schedule of the project and the strict professionalism of the work does not give time to ponder differences in behaviour or communication. The fact that many of the individuals in the project knew each other from previous projects and the experience of working with members of different cultures were factors that diminished the importance of cultures. Also, once people get to know each other better working together on regular basis, the cultures start to play less of a role and people see each other more as individuals than representatives of a certain culture. Many of the respondents emphasised that the communication of the project team, namely the site organisation was easy and the differences were minor. As an interviewee describes:

I thought it [culture] would make a bigger difference, but after a few months working together you see that people are really heading for one aim...then these differences especially in this group of people [site organisation], you do not find them anymore...if you go somewhere else here and the people are in their usual lives, it is different...but here these differences do not matter anymore, the culture is a minor detail...

All interviewees emphasised that multiculturalism of the project was in no way a problem but according to most respondents, especially the project managers, it is something that needs to be considered and paid attention to. It came up in several interviews that the “culture” or the climate of the project was the one of the client, a Portuguese one and the other participants, organisations and individuals adapted or had to adapt to that mentality. As one respondent described, the “Latino” mentality or the softer approach needed to be taught to some parties of the project. The softer approach included the emphasis on interaction, direct contacts and social activities.

The interviewees had noticed cultural differences in work behaviour on both personal and organisational level. Differences were noted in the level of hierarchy, the Portuguese and German organisations being more hierarchic than Finnish and Swedish ones that were described as more lateral and horizontal. The Portuguese organisations were according to Finnish respondent careless or more relaxed than Finnish when it came to obeying or following for example E.U. directives. Punctuality was a difference reported by both Portuguese and Finnish respondents, the Finnish were more critical on the Portuguese carelessness of deadlines while for example one of the Portuguese respondents claimed that he did not see such a problem in that as the Finnish counterparts apparently did.

The differences reported by Finnish respondents included the slackness of Latinos vs. the meticulousness of the German and Nordics and the informality of the Latinos compared to the formality of the German and Nordics. For the Latinos personal relationships are vital in business relations while the Germans and the Nordics prefer more formal approach. Also, some Finnish respondents described that in the meetings, once things got more intense, if there was an argument for example, the Portuguese were concerned with maintaining the harmony and were thus more likely to give in whereas the members of other cultures were more assertive in their approach. One Portuguese respondent also mentioned the need of saving face in all situations. This is probably also the reason for the Finnish respondents being more open and critical in their analysis than the Portuguese respondents who were more careful in stating their opinions. The differences the Portuguese stated were to do with the warmth and coldness of the cultures, the Southern cultures being warmer and claiming that the Portuguese are used to more contacts and more feedback, to more interaction in their work that the Nordics apparently were.



Four respondents reported difficulties in language use. One Finnish interviewee stated that for the supervisor level the language is usually no problem but for the designers the threshold is usually higher. Even when the language skills are good, the preference is always to use one's own language. It was also noted that the client organisation took principally care of the contacts to Portuguese suppliers and the Finnish consultants had experienced some difficulties in trying to communicate with them. The reasons were according to the respondent the poor language skills of the supplier or the simply the preference of transacting with an already familiar partner, the client in this case. Few of the Finnish respondents also assumed that language problems were behind some other inconveniences of the work. It seemed that, as the case was in the main consultant organisation, the designers do not speak English as well as the representatives of the company who often are the ones who take part in the meetings. Then the designers do not get to talk directly with each other but through the representatives. This presents a risk for the information to alter before it reaches the right person. In many of the supplier and contractor organisations from Portugal, Spain and France only the spokesperson of the company had good language skills. Sometimes, even when the language skills are good on both sides, the culture still affects:

We try to speak in English... and I think that even when Portuguese people use English very well, but they use different English from what Finnish people use... so in the first times we were trying to find a right way to communicate with each other.

## **6.6. Effectiveness**

The effectiveness of the communication of the project PM is evaluated through the level of communication satisfaction (6.1.), efficiency of channels (6.3.) and other factors that impact effectiveness, in this case conflict handling, communication climate, motivation level, quality of management and the quality and effectiveness of instructions of communication. As effectiveness is a more general concept in this particular study, the results of the first two parts of effectiveness were handled in their own chapters. In addition to discussing conflict, climate, motivation, management and instructions in the interviews, the interviewees were asked to give a definition of effective communication in a project context.

### **Conflict**

The respondents divided the conflict to internal and external ones. The conflicts in organisational level are usually questions of technical issues, time schedules, different ways of working etc. but always about issues, not personal matters. In meetings all parties may not

see eye to eye about everything and a solution needs to be found in order to get on with the work. These conflicts do not affect the personal relationships. Interpersonal level conflicts are more likely to occur within organisations.

The cultural differences were also evident in the way emotions are expressed. As one of the Portuguese respondents stated:

We play with that, we joke with them.. and we go ahead, we got to solve the problem and not get into conflicts.

The Portuguese are more likely to raise their voices and express their emotions in a more open manner than the Finns for example. Then the situation is not really a serious conflict, it is more question of “theatre” as one Finnish respondent described the incidents. The different levels of hierarchies also affect the occurrence of conflicts. In Portuguese, more hierarchic organisations the supervisors show their anger to their subordinates more openly. In general, when the representatives of different organisations are involved or within the project team, politeness and maintaining the harmony in relationships is important and thus conflicts do not occur in personal level.

When conflicts are about issues and not people, solving the situation is more question of negotiating a common solution. If necessary, the conflicts may be solved on the basis of the pre-negotiated roles and responsibilities, which are stated on the contract. According to one respondent personal contact is the best solving method. In the case of interpersonal conflicts solving the situation may be trickier. In PM, one more serious incident occurred in the site organisation. The result was that one of the individuals involved stayed out of the project.

## **Climate**

The communication climate of the project was discussed in two levels in the interviews, on the internal level and on the external level. Also, the communication climate of the site organisation and that of the other organisations are differentiated. Some of the interviewees, the consultants and the suppliers stated that during the project they were a part of two organisations, the site and their own. Especially some of the consultants stayed at the site during the entire project. The suppliers were located at the site for shorter periods of time, mainly during the erection. It should be noted though that the suppliers had their own site organisations that were separate from the site organisation of the client and the consultant. Thus the suppliers were never a part of the site organisation that is the focus of this study. Also the representatives of the client differentiated between the site organisation and the

mother organisation. In the interviews the focus was on the communication climate of the project, meaning two levels, within the project organisation and between the organisations involved in the project. In addition, all the organisations involved have a project team within their organisations consisting of people some of who never work at the site. Still, these teams belong to the project and thus to the project organisation.

The communication climate of the project as a whole and of the site organisation was described as task-oriented, work-oriented, professional, open, serious and committed. Many interviewees stated that the communication climate or the general atmosphere was the one of the client organisation. The atmosphere of the site was reported to be sometimes affected by the rush and the stress and the tight schedule, the politeness went down to minimum because people became so absorbed in their work. The openness, the informality and the easiness of contacting people was emphasised when the site organisation was described. Many respondents expressed regret for not having more social gatherings within the project team. Social gatherings were seen to be important for the motivation and climate of the project.

The climate and the relationships between the different organisations were described as good and open. The fact that the relationships remained so good was contributed to the client organisation and to their way of working that became the culture of the project.

The communication climate of the project team of the consultant organisation came up in few interviews. For those individuals in the designer level who were located in Finland the project was pleasant and flexible. In the supervisor level the situation was slightly different. The organisational structure of the project PM was not the most typical to many of the individuals and that caused some friction in the relationships. Still, it was claimed that this had no bearing on the overall successfulness of the project.

## **Motivation**

Organisations involved in the project are motivated by the references they get. In the individual level the motivators vary more. The project itself, being a part of something big, a common accomplishment was motivating many of the respondents, especially the individuals from the client organisation. For them working in a project is a once in a lifetime –experience:

There is always motivation to work in a project like this because this is a project we do not have everyday, in our company, OK, it appears in every five or ten years... the others' motivation is concerned with other things like money but everyone likes to work in a project like this...

For those who do not have previous experience of project work the future prospects, personal reference and a possibility of a permanent job are important motivators. Also the financial benefits are motivating.

For consultant and suppliers who always work in projects the motivators are somewhat different. According to one interviewee certain type of people end up working in project work. Some of them just kind of drift to working in that business but for some it is the kind of work they enjoy doing. Project work is variable and the routines change according to the stage of the project, the goal keeps on getting closer. A project has a definite duration, a beginning and an ending. This is especially the case for those who work on the site. For those members of the project team whose work is conducted within the home office all projects must resemble each other. The respondents who work at the site organisation also reported that the location is also highly motivating, seeing the progress with your own eyes makes things concrete.

Other motivating factors for those interviewees that were experienced in project work are the pay and other benefits gained like travelling. Doing the project for a familiar company was also named as a motivating factor. The project itself may also be motivating, with new technical solutions or other specialities. Personal ambition inspires some individuals. Many respondents agreed on the positive effect social activities of the project team had on the level of motivation. Especially for the expatriates the social gatherings are important.

## **Management**

The opinions regarding the management varied a great deal. Some were very happy and satisfied with the management and others were quite critical. The positive evaluations of the management were quite blunt, only saying it was good. The more critical comments dealt with the delegation of responsibility, the amount of feedback and valuation of different disciplines. One respondent felt that his discipline was not as valued as the others had been. According to another view the management of the project was too distributed with too many supervisors. The respondent felt that when there are so many supervisors the information is likely to be filtered and changed and not properly distributed.

## **Instructions**

The instructions regarding the communication practices in a project can be put to two different categories, there are instructions about the external communication and instructions about the internal communication. Basic instructions about communication were the rule of documents having to be on paper to be official and some general guidelines of document handling.

There are more specific instructions regarding the document exchange. The consultant makes a document delivery schedule for the suppliers. Few respondents expressed the need of improving the document delivery schedules. In an ideal case each supplier and contractor would receive a detailed custom made document delivery schedule according to which they would plan their own detailed document schedule. For instance paper machine suppliers usually make their own detailed document schedules as was the case in PM. This practice should be extended to all suppliers. In the interviews it was stated that in practice it would be too time consuming to make such detailed lists.

## **Definitions of effective communication in a project**

It would be very effective if there was no need for communicating, if all the drawings would be very very clear and they were well done...

Many of the interviewees emphasised the importance of fastness of communication. Sometimes decisions need to be made quickly so communication needs to be also quick and fluent. For communication to work rapidly, the groundwork has to be done properly. Preparation is the key. Teamwork, the clearness of roles and responsibilities, the common definition of the objectives and rules were also seen as important elements of effectiveness.

The communication of the project is based on certain rules, the contract and the instructions on document handling. For communication to be effective, these rules and instructions should be followed to detail. The communication should also be fluent and open in the informal level in order to back up the formal side of the communication because, as one interviewee stated, the information will never be perfect. The meetings are important and they should not be time consuming. The informal direct communication is important also because it is richest in information. An ideal project communication is committed to the successfulness of the project and it is respectful to all participants.

## **6.7. Day-to-day communications**

One objective of this study was to describe the day-to-day communication of the project. In order to do so, some basic elements of the structure of the project need to be identified. As the focus is on the project PM, it is used here as an example. Still, many interviewees, especially those with comprehensive experience of project business, were likely to discuss this project in the light of other projects. Comparison to other projects also provides some information for the measurement of the successfulness of this particular project by giving it a larger context in a project business.

The project communication has been handled basically in two levels in this study, in the internal level and in the external level. The internal level refers to the communication within the project organisation and the external level to the communication between the organisations involved in the project. In the question 5 of the questionnaire the interviewees were asked about the relationships of the organisations in a project as the roles are somewhat different.

### **Different organisations in a project**

The project PM was somewhat exceptional in three ways. First, the project manager of the consultant was also the engineering manager of the client, thus having a very strong position in the project. Second, the site organisation existed since the very beginning. The consultant had two project managers, another stayed in Finland with the consultant project team. These factors made this project atypical for many interviewees. The different structure of this project was of helped to speed up the decision-making process because there was a representative of the consultant always present at the site taking care of the direct contacts to all directions. In this project the line between the consultant and the client was very fine and they basically belonged to the same team, to the same side. Belonging to the same team was especially emphasised by many interviewees. So there was only two “opinions” in this project instead of three, the opinion of the client or the consultant and that of the supplier. The existence of the site organisation both eased and complicated things. Having a consultant with a client all the time made things easier but on the other hand doing the design work in two different locations complicated things.

The third special feature of the PM was the history the consultant and the client shared the previous project, in which the companies had worked together in approximately ten years

earlier. The organisational structure had been the same in the first project and the site organisation had also been formed in the early stages back then. The first project had been a success so in this project the previous one, PM1 acted as an example. The personal relationships and the reference from the first project was a big asset to the consultant. The consultant project manager/ client engineering manager was the same in both projects so it was his personal charisma and reputation that had given him a special position within the client organisation and thus his position in this project was even stronger than in PM1.

The supplier has a different role compared to the client and the consultant. The client has hired the consultant for the know-how and experience whereas the suppliers have negotiated a contract with the client for supplying technical equipment or other devices. The client is concerned with the time schedules and the consultant with the technicalities regarding the supplier. The client and consultant form a team and the supplier remains more distant in their triangle. Within the organisation there are disciplines of each area of the project that form their own inter-organisational teams. The organisations are also different to the degree that projects are routine to the consultant and to the suppliers but for the client organisation major projects are rare and for many individuals a project is a once in a lifetime experience.

### **Decision-making**

There are many different kinds of decisions to be made in a project. The type and scope of decision depends on the organisation and position in the project hierarchy. The project decisions can be divided to the decisions about the finances and contracts and to the decisions that deal with the implementation of the project. In the project hierarchy the project manager of the client (see appendix Organisational chart the project PM) has the overall control of the project. The project manager makes the decisions regarding the finances or commercial issues of the project and approves all technical solutions. The engineering manager is in charge of the technical solutions. The consulting engineers make decisions about the technical design. The area engineers handle issues related to the contracts.

The contracts form the reference according to which the suppliers make decisions. The suppliers make basically two different types of decisions: (1) decisions regarding the technical solutions of their supply that are defined in the contract and (2) interface decisions. The suppliers present technical solutions regarding their supply in relation to the paper mill to the main consultant as interface decisions which are further discussed and then decided and

approved. Anything that is not in the contract needs to be individually discussed with the project management of the client.

After the contracts have been made, they need to be managed. The contract forms the basic guideline for the work and thus decisions. The decisions about the implementation of the project concern usually technical details. The decisions about design and technical aspects of the project are problem solving by nature, teams come up with possible solutions that they recommend to the project management which makes the final decisions. Basically no decisions are made individually, information is needed and provided by many sources and confirmations for procedures need to be searched. Project work is not an individual mission but a common task. One interviewee compared building a paper mill to making of a jigsaw puzzle, the team is supposed to put together thousands of individual pieces in order to build a complete factory that makes tons of paper per day. Another interviewee describes the decision-making:

There is always many decisions to be made because design is not always the same, you need to find a way to do things...you have to decide whether it is OK or not, you have to decide whether it has to go to the designer to check if it is possible to do...

When decisions are made, they usually need to be made fast. The decisions are made on basis of knowledge and know-how that stem from experience and intuition. The information needed for the decision-making does not need to be perfect but sufficient in order to be able to make the decision, to dare to make the decision, as one interviewee put it. Another informant describes:

In a project a decision needs to be justified... you need to analyse things and why it is like that...and the decision is at the end very obvious, very logic...what is important is to take the decision in the right time, not to delay decisions.

### **Daily communication**

It is only talk here, we have to talk immediately or we loose days and days to solve things... we got to communicate to everybody to solve everything as soon as possible...

The daily communication of the project takes place in two levels. The everyday contacts between the organisations consist mainly of sending the documents and drawings and keeping all participants informed on the status of the project in regular meetings and by using communication technology like fax, phone and E-mail. On the other hand, the day-to-day



communication of the site office is more of a typical internal organisation communication with direct contacts, internal project meetings and informal contacts of the project organisation members.

Practically all interviewees were in a centre position when it came to information distribution.

For example as a respondent stated:

I am the one who collects information and looks how this information has to be spread again and which people needs the information to do the best they can in the job..

In a project work managing information is a fundamental activity on which all the work depends on. The basic information, the contracts and drawings etc. are distributed routinely but almost all additional information and details need to be requested. The interaction of the disciplines and of all participants on both internal and external level is of vital importance. The everyday work at the site office is to a great extent “pure” communication like making inquiries, talking and negotiating, finding solutions, giving and receiving information. As an interviewee describes:

I have to on daily basis, we have to get information and report information.. we have to know as much as possibly to exactly, to control.. we need to know also what is happening, even in the areas we are not controlling because there are so many interference so we need to know.. when ever we feel that we do not know something the only way is to push people to tell us what is happening..

### **Changes in communication practices**

The interviewees described the communication of a project as a process that keeps on changing during its life span. The communication practices and the day-to-day communication of the project change depending on the phase of the project. This is especially the case in the site organisation. For the other project teams, designer teams that are located in their own organisations, the communication during the project remains more or less the same when it comes to communication practices. The stages are more evident for the core group of the project, for the project management, project secretaries, chief designers, area chief designers and other supervisors who work in the project during all of its stages. Basically only the core group of the project organisation remains the same during the whole project, rest of the people only come along for a specific phase or phases.

According to the interviewees during the pre-engineering the communication was based on teamwork, the work was conducted by a small team. In the appraisal phase the client and the

consultant met up with the suppliers and the communication was focused on the formal, external level. In this phase the formality is important because while the contracts are being made, all the technical specifications need to be clear and on the paper. During the implementation phase the project organisation was formed and the communication became more informal and direct in the day-to-day operations. The site office became the centre of the project. During the final phase, commissioning, the internal meetings were held on daily basis. The communication becomes more and more informal towards the end of the project. According to an interviewee the communication also improves and develops during the project. In the beginning it can be a bit like shooting in the dark before the right methods and procedures are found.

### **Project organisation vs. static organisation**

[in a static organisation] there is always some kind of routine... the major difference is that in a project you are always changing the reality, always facing new things... each day and each decision is always different from another, you do not pass twice the same thing and decision...

According to the interviewees there are several differences between the communication of a project and of a static organisation. In a project there is no time to develop the communication system; it has to be accurate since the beginning because it is such a critical factor to the successfulness of a project. In project organisations the communication is more intense because of the time limits; an objective needs to be accomplished within the given time frame. A project has a beginning and an ending.

In a project information is always new and it affects many disciplines. With each piece of information the quality, the accuracy, the method of handling it and the further use of it needs to be established. A project organisation is an expert organisation formed for a specific purpose so in most cases interpersonal level conflicts are put aside because the projects only lasts for a certain time. In a static organisation the interpersonal conflicts are more likely to become more intense. In a project there is no repetition, each task and step is more or less unique. Communication in a project is also likely to be more stressful than in a static organisation because of the limited time and the rush.

## 7. DISCUSSION

The results of the study are discussed through answering to the research questions.

### **RQ1      How satisfied the project organisation members were with the communication in the project PM?**

Communication satisfaction is an outcome of interaction and because of this quality it is one of the indicators of the successfulness of the communication in this study. According to the results of the part A of the questionnaire that handled communication satisfaction the organisation members were somewhat satisfied with the communication of the project PM. According to the results the respondents were most satisfied with the relational dimensions of communication satisfaction. The difference was not great compared to the other dimensions, informational and informational/relational dimensions.

In order to view the level of communication satisfaction of the project organisation and especially the level of satisfaction to the informational dimensions of the concept, the results regarding the communication channels need to be taken into consideration as well. Also according to Wiio (1975, 58) channels efficiency is a part of the communication satisfaction. The respondents were satisfied to the channels since there were no significant channel gaps. The channels efficiency is discussed in more length with research questions 3 and 4.

The respondents were most satisfied with their immediate supervision and least satisfied with the top management, with the information they had about how they were being judged, with the recognition they received and with the timeliness of the information. Pincus (1986) concluded in his study about communication satisfaction, job satisfaction and job performance that employees' perceptions of organisational communication are directly related to both their job satisfaction and job performance. He found out that certain aspects of organisational communication that have both informational and relational functions were the major contributors to the communication-job satisfaction and communication-job performance relationships. These aspects of organisational communication were supervisor communication, communication climate and personal feedback. This finding also confirmed the results of previous studies. (Pincus 1986, 413 – 414.) In this study these aspects of organisational communication, especially supervisor communication and communication climate were dimensions on which the respondents were very satisfied. The feedback

dimension did not receive as good results but still the results were clearly positive. Communication climate was also one of the issues covered in the interviews and the results showed that the respondents had perceived the climate in a positive way, that it was open and task-oriented. This indicates that if the results are viewed in the light of Pincus's conclusions, the level of communication satisfaction in the project contributed to job satisfaction and job performance.

The respondents were most satisfied with the communication they had with their immediate supervisors. On the other hand, the results of the interviews were more diverse on this issue. This could be explained by the fact that the interviewees themselves were supervisors or belonged to the top management of the project. According to Pincus (1986, 396 – 398) internal managerial communication and supervisor communication contribute to organisational effectiveness. Since the respondents were satisfied with their supervisors and their communication, it could be assumed that this contributed to the effectiveness of the communication of the project.

According to Juholin (1999, 56) satisfaction with communication and satisfaction with job and organisation as a whole, depend on one's expectations. Most of the respondents are project work professionals so they had a frame of reference when they evaluated the communication of a project. Also those project organisation members who were not as experienced in the project work were likely to have expectations about the project and its communication. The difference is that they based their evaluation on their experiences in more static organisations. In the interviews the respondents were generally happy and satisfied with the communication of the project. Even though some complaints were made, no-one claimed that there had been any major issues or troubles that would have disappointed them. On the basis of the results of part A and the interviews, it can be concluded that the communication of the project PM met the expectations of the organisation members and the organisation members were satisfied with the communication so the communication of the project PM was successful from that point of view.

## **RQ2      What were the main shortcomings in the communication of the project PM?**

The part B of the questionnaire was designed to find out what were the main shortcomings in the information flow of the project PM.

The results showed that the main shortcomings of the communication of the project PM were:

- Information is not easily available
- Amount of feedback is not sufficient
- Management does not know what other members of an organisation think
- Information is out of date
- The responses given are not sufficient
- Management does not tell about important issues
- “information does not reach me”

The main shortcomings listed here are the statements most agreed with. None of the statements were really agreed with; the most agreed reached a mean of 4.5 in the scale from 1 (strongly agree) to 7 (strongly disagree). The least agreed statement reached a mean of 5.84. The statement *Management does not know what others think* had the highest variance, 2.48. What can be concluded from the results is that there were no real shortcomings in the communication flow of the project PM. It can be further concluded that if there were no real shortcomings in the communication of the project, the communication was successful in that respect.

Part B was partially adapted from the OCD-studies. The main shortcomings that the OCD-respondents had perceived in the communication of their organisations were:

- Management staff does not know what other members of an organisation think
- Information comes as a rumour
- Management does not tell important issues
- Information is not easily available
- Information is inaccurate
- “information does not reach me”
- Information is useless
- Information is out of date.

(Juholin 1999, 79.)

The shortcomings of the in the communication also relate to communication satisfaction. Many of the issues refer to the dimensions of the concept (see e.g. Downs 1988, 113 – 114.), to communication climate, supervisor communication, media quality, horizontal communication and personal feedback. Thus the result that there were no major shortcomings

in the communication of the project confirms the result that the project organisation members were somewhat satisfied with the communication of the project.

**RQ3 Did the project organisation members receive all the information they desired from the information channels in the project PM?**

Channels efficiency was a topic of both the questionnaire and the interviews. The efficiency of the channels is determined in this study on the basis of channel and information gaps, and by the information obtained in the interviews about the formal and informal channels.

According to the results there were no significant channel gaps in the communication of the project PM when all the respondents were grouped together. Only in the subgroup of consultants there was one significant gap with the channel *Project contract negotiations*. This gap may be explained by the information that came up in the interviews. During the contract negotiation phase, the appraisal phase, the contract negotiations were mainly taken care by the client project organisation including the project manager of the main consultant who was also the engineering manager of the client. The chief designers of the main consultant did not take part in the negotiations which were against their wishes. All contacts of the chief designers to the suppliers went through the project manager at the site. The management did not see it necessary for the designers to have direct face-to-face contacts to the suppliers. The contacts to the supplier designers would have speeded up the work according to the designers of the consultant. According to the view of the management the benefits would not have been grand enough in comparison to the money and time lost in travelling. This disagreement with contacts probably also explains the results in communication satisfaction with the subgroup of the consultant. The respondents of the subgroup were least satisfied with the informational dimension of the communication satisfaction, more specifically with the way the project meetings were organised and with the quality of the written directives and reports.

Juholin (1999, 78 – 79) presents the main results of OCD-studies in Finland that has been gathered and completed during the 1990's by a Finnish communication consult agency. The database of OCD-studies represents nearly 200 000 people in different kinds of organisations of varying sizes. The average reply rate has been approximately 65 %. The main results handling channel and information gaps indicated that the largest channel gaps existed in informal face-to-face communication. The channels that were most problematic were:

superiors and management, immediate supervisor, shop stewards and briefings. Smallest channel gaps existed in co-workers, newsletters, E-mail and notice boards. (Juholin 1999, 79.)

In contrast to OCD-studies, some of the least problematic channels of this study were *Project management briefings* and *Immediate supervisor*, those that were the most problematic in the OCD-studies. From the most problematic channels in the study one presents informal communication and the others formal communication: *Project contract negotiations*, *co-workers in the project* and *internal project newsletters/memos*. The result that the immediate supervisor was not a problematic channel confirms the results in communication satisfaction. According to Åberg (1996, 141 – 144) the immediate supervisor is usually the most important source of information. In the interviews all but one interviewee stated that the best channels for receiving information about the project were the informal channels, the direct contacts to the key people. The key people were the immediate supervisors, project management or representatives of one's own organisation or of the main engineering consultant.

Meetings were mentioned by all the interviewees as one of the main formal channels in external and internal communication of the project. For many interviewees the meetings were also among the best channels to receive information because of the richness of the information received and the interactive nature of the meetings. According to Åberg (1996, 182) meetings are effective channels to inform the employees because in the meeting the situation is more personal than when using technical media. Also in the meetings the communication has two ways and immediate feedback can be given. In addition, group dynamics can be taken under consideration. These group dynamics refer to the norms of the work groups, support of the unofficial leaders and to employees committing with their opinions. Meetings are also arranged on regular basis, which increases their effectiveness. (Åberg 1996, 182.)

When information is very scattered and the pieces of information are highly interdependent, all the channels of communication should be kept open all times. An interruption in the information flow is usually a result of different communication cultures of various subgroups. Difficulties in communication can also be explained by the difference in time limits of varying subgroups or by the completely different kind of work done in the subgroups. (Tukiainen 1999, 50.) In a project the information is somewhat scattered because of the various disciplines. In a project the information is highly interdependent. One issue that came up in many interviews were the time schedules and their co-ordination. In big projects like

PM the co-ordination of the timetables of the various disciplines is one of the biggest tasks of the management.

The choice of media is influenced by organisation-wide perceptions of the communication functions served by various channels. Media choices in organisations are usually strategic and therefore there is a risk of not making the right choice. It is safe to base the choice on previous experience and on organisational norms even though that means that the choice of channel might not be optimal. (Dobos 1992, 45.) In the context of a project the media choices are usually based on the experience of the consultant and guided by the contract. The safety of the option is a value in the project where the precondition for the channel is its effective functioning.

According to the theories presented in the conceptual basis of the study, the communicator style is likely to affect the choice of media. It could be further assumed that also a cultural background has an effect on the individual predisposition about a certain media. On the basis of the results of the study the same conclusion can be drawn. The Portuguese respondents emphasised the benefits of visual and oral media and stated that those were the media they preferred to work with. Also the Portuguese were more likely to emphasise the need to chat about things not related to work and to starting the conversations with a chat about for example, football. Also the Finnish respondents remarked that the Portuguese counterparts preferred face-to-face interaction. In contrast, the Finnish and the German interviewees were more likely to lay emphasis on the importance of formal communication. Naturally, this study or the sample is not comprehensive enough to make any real conclusions but nevertheless, the results indicated these differences.

To sum up and to answer the research question, according to the results the communication channels of the project were successful and delivered the organisation members all the information they desired to the extent that there were no significant channel gaps. On the basis of the interviews, the amount of information is sufficient and the formal and informal channels were complementary to each other.



**RQ4 Did the project organisation members receive all the information they desired in the project PM?**

If the channels were working as desired in the project PM, the information distribution was not as successful. The largest gaps, all significant existed in *External factors that affect the project, Training and courses* and *Plans and targets of other project teams*. In addition, in all but one issue the information gaps were larger than 0.5. According to Juholin (1999, 92) gaps smaller than 0.5 do not cause any particular harm in the organisation. The smallest gaps were in issues related to one's own work, project team or discipline. The results indicate that work in the project is mainly centred on one's own activity. This can be explained by the tight time schedules and the different roles of the disciplines.

In the OCD-studies the largest information gaps existed in communicating changes in production and work methods, company plans, staff benefits, labour situations and organisational changes. The smallest gaps were in communicating social activities. (Juholin 1999, 79.) The results of the OCD-studies do not compare to the project context as the issues that had the biggest gaps in those studies are not as relevant in a project organisation.

The differences between the subgroups were notable. The Finns and the consultants were better informed compared to the other nationalities and other organisations. Interestingly, the biggest gaps in the other subgroups existed in issues like *Social activities*. Significant gaps also existed in more fundamental issues like *Project products and services* and *Project plans and targets*. Gaps in these fundamental issues are most alarming. How is it possible to work effectively and to contribute to the project fully if one is not sufficiently informed about the objectives of the project? The results of the subgroups other nationalities and other organisations indicate that the suppliers are the least informed parties. The consultant and the client seem to have better access to information.

According to the results it can be concluded that the information distribution of the project PM was not as successful as it could have been; the project organisation members did not receive all the information they desired.

**RQ5            How did the different parties (client, consultant, supplier) relate to each other in the project PM?**

According to the results one of the main characteristics of this project was the somewhat atypical organisational structure. One of the project managers of the consultant was also the engineering manager of the client and thus belonged to both organisations. Because of this arrangement the two organisations were closely linked and the client and the consultant were viewed as one unified team, as a single party of the project. This method for implementing a project is called the partnership method. The organisational structure and the choice of method was explained by the previous project that the client and the consultant had done together. The previous successful project was a basis and a guideline for this project. Because of the common history there was an existing relationship between the parties, both on organisational and on the interpersonal level.

Now that the client and the consultant formed a team, the suppliers remained more distant. The consultant is technically oriented towards the suppliers whereas the client is more interested in keeping the timelines and the budget. The suppliers also are very different compared to each other how they relate to the consultant and the client. Basically the suppliers can be divided depending on scope of their supply. The suppliers that were included in this study were the *package suppliers*. Package suppliers supply the paper mill with tailored entities that have several components as for example the paper machine or the ventilation system. The supply package includes also the installation or the supervision of the installation. Standard equipment suppliers deliver pre-designed components like the ventilators as ordered. Package suppliers have a closer contact to the site organisation and personnel, they have their offices at the site and their representatives work at the site during the erection.

It was evident on the basis of the results that the co-operation between the client and the consultant worked very well and there were no reported difficulties. The relationship between the client and the consultant was a kind of a partnership. The relationship between the suppliers and the client and the relationship between the suppliers and the consultant were not as informal as between the client and the consultant; they were more professional in their nature. The relationships also depended on the type of supplier and the closest relationships were with the main suppliers. According to Fleming and Koppelman (1998, 36) an effective technical co-operation between all project teams or departments is necessary for the success

of the overall project. According to the results in the level of relationships between the organisations no hindrance to effectiveness in the co-operation was reported.

**RQ6            How did the multiculturalism affect the work and the interaction between the project organisation members in the project PM?**

According to the results the multiculturalism mainly affected the work and the interaction between the project organisation members and specifically the site organisation through the organisational climate that was adapted to the project from the client mother organisation. The organisational culture was described as a “Latino” referring to the overall mentality of taking care of things. Also the Finnish respondents described the climate or the approach to things to be softer than what they were used to referring to the emphasis on relational aspects. The Latino organisational culture of the project was defined as the emphasis on informal communication and direct contacts, close relationships and the preference for face-to-face interaction.

The Portuguese are more collectivist than for example the Finns in the cultural dimension of individualism – collectivism. The description of the organisational culture of the project is collectivist emphasising the social networks and in-group harmony. The site organisation represented an in-group that was clearly distinguished from other groups or organisations. Especially the Portuguese respondents used vocabulary such as *us*, *we* and *our team* when referring to the site organisation including the representatives of the consultant. The client organisation was also reported having been eager to maintain the harmony in the meetings and in keeping the atmosphere courteous during the entire project. Preservation of face and maintaining the atmosphere of the in-group harmonious are typical values in collectivist cultures.

The management of the project PM viewed culture as something that needs to be considered and paid attention to starting from the practical arrangements to less apparent considerations how the relationships and contacts were taken care of in the project. Knowledge about the different cultures and the companies and also the previous experience of working with other cultures were seen as beneficial. In this the management seems to have adapted an approach similar to Varner’s (2000) intercultural business communication strategy but in the context of a project. In intercultural business communication cultural and business considerations

influence channels of communication, levels of formality, use of technology, content and style of delivery.

One of the differences between the Finnish and Portuguese organisations that came up in the interviews was the obedience to the rules. The Portuguese organisations were described more careless regarding the E.U. directives than the Finnish. One of Trompenaars's (1993) cultural dimensions differentiates cultures on the basis of how absolute they perceive the rules and laws to be. Universalistic cultures have an unconditional approach to rules, they are the same to everyone in all situations. According to the particularistic view the interpretation of rules depends on the situation. The description of the Portuguese relaxed approach to obeying rules could indicate that Portugal is a particularistic culture. It was generally apparent that the Finns were much more concerned about following the rules and norms to a detail than the Portuguese.

Another of Trompenaars's (1993) cultural orientations could also be identified in the results. There were notable differences in how the members of different cultures reported having expressed emotions. The Portuguese used emotional expression more openly and as a communicative tool in order to emphasise the importance of their messages. Open showing of anger was carefully controlled though, and the appropriateness of emotional expression depended on the context. It was appropriate to express for example anger to subordinates within one's own organisation. The vividness of expression and the strong emotions were commented to have been kind of a theatre thus not causing any real conflicts whereas in real conflict situations the harmony was maintained and the situation was solved otherwise. The emotional expression was explained by differences in level of hierarchy and in communicator styles. The differences in emotional expression can also be explained with Hall's (1976) concept of high- and low-context cultures. Portugal is a high-context culture in which most of the information is either in physical context or internalised in the person. According to Singelis and Brown (1995, 361) in Mediterranean high-context cultures the exaggeration of emotions is typical.

Some problems that the respondents had experienced were contributed to the lack of sufficient language skills, either one's own or the counterpart's. Even when people do speak the same language, the difficulties in understanding might not be resolved. According to Varner (2000, 48) people bring many of their own cognitive frames to the communication when they use a foreign language. Some of the problematic issues related to poor language skills had to do

with the lack of direct contacts on the designer level. The contacts had to be taken care through the higher levels of hierarchy, via the spokespeople of the company who usually were more fluent in English. There might be other underlying reasons for the lack of direct contacts in the designer level than the lack of language skills. A partial explanation for not having a direct access to the designer level could be found in cultural differences in power distance and level of hierarchy. Finns are accustomed to lateral organisations where direct contacts to all are possible. In Latino cultures the organisations are hierarchic and thus direct contacts are not desirable. Germany is usually also viewed more hierarchic than Finland. Also the interviewees had noticed the differences in the hierarchy in organisations between the cultures.

According to Kim and Sharkey (1995, 21) people in multicultural organisations employ different communication strategies than they do in organisations that are culturally homogenous. On the other hand, Laurent's (1986, 97 – 98) research of multinational corporations indicates that the organisational culture does not reduce or eliminate national differences, but maintains and enhances them. It seems that in the case of the project PM both of these statements were true. Most of the respondents had been paying attention to the cultural dimension of the project and reported doing so also in practice. Naturally the different communication strategies were not directly studied so no conclusions can be drawn. Still, it seemed that cultures did affect the communication practices and choices of strategies in individual level. Also, the fact that so many differences were reported to exist between the cultures seems to indicate that the national cultures existed and flourished during the project and that the organisational culture of the project did not diminish them in any way. The Finns adapted to the "Latino" organisational culture moulding their communicative strategies and at the same time remained very "Finnish".

The social behaviour is determined by the kind of self that operates in the particular culture (Triandis 1989, 517). The independent-interdependent construals of self have been suggested to parallel with the cultural dimension of individualism-collectivism. This suggests that in the Portuguese the interdependent self-construal is likely to be more active whereas Finns are likely to emphasise the independent self-construal regarding to others. The results suggested that the Portuguese were more concerned with the relational outcome than the Finns. The concern for relational outcome has been associated with interdependent self-construal. On the other hand, while the cultural differences towards the relational aspects and the importance of direct interaction were clear, it was also very evident that the project group was highly

committed to the project and thus with the task outcome. This suggests that in the context of project such as PM the situation is likely to endorse the activity of the independent self-construal.

Another individual level concept that was introduced in the conceptual basis of the study was *identity*. The respondents of the study differed to the degree of how much experience they had of other cultures. Each interaction affects and changes the identity one has of oneself so the identity is not a static construct. The difference was most evident in the way the respondents described other cultures, the more stereotyped the descriptions were the less experience the respondent had. Still, even though the descriptions were stereotyped, the respondents agreed that once they got to know each other on the personal level the cultures did not matter anymore. As Cupach and Imahori (1993, 115) state, when two people with separate cultural identities have a relationship to the extent that their relationship can be considered interpersonal instead of intercultural, their cultural identities have receded into the background and their individual personalities have become evident.

It can be concluded that the multiculturalism of the project PM did have a certain effect on the work and the interaction between the project organisation members. The organisational culture of the project was adopted from the client who moulded the communication of the project. Especially those members of the project organisation who had regular contacts with other organisations and thus cultures had to have taken into account the cultural aspect of the communication. On the other hand, it seemed that the cultures were more evident on the inter-organisational level whereas the communication between individuals was more interpersonal than intercultural. On the daily work it appeared that the cultures were present but they did not have much affect on the actual work being done. The effect was clearer in the interaction than in the work.

#### **RQ7            What was successful in the communication of the project PM?**

According to the results the most successful aspects of communication of the project PM were the communication channels and the relationships both on interpersonal and organisational levels. The respondents listed the communication channels as one of the most successful factors of the communication and the results regarding the channels gaps confirm these statements to the degree that there were no significant channels gaps in the communication of the project PM.

The personal relationships and the communication climate were noted as the successful aspects of communication, the team effort and motivation of the organisation members were the main contributors to the successfulness. The communication was also appreciated for its fluency between the organisations. It seems that the good climate and relationships among the project members both on interpersonal and on the organisational level form the necessary basis for the overall successfulness of the project. Effective communication tools and communication channels contribute to the successfulness. The competent and motivated individuals and supervisors are the key to the success.

**RQ8            How successful was the communication of the project PM according to the organisation members?**

The respondents had a forthright approach to the measurement of the successfulness and effectiveness of the communication of the project: if the machine is running, then the communication had to be successful:

We made the right decisions, I think, the machine is running..

The project is running so it [communication] has to be effective..

The successfulness of the communication and the project are thus inseparable. On the other hand, in the feedback section of the questionnaire there were two statements regarding the successfulness of the project and the communication. 89% of the respondents thought that the project had been successful in comparison to the 76% who regarded the communication of the project to be successful.

When internal communication is measured, the only fair way to see whether the internal communication achieved its goals is to see if the organisation's outcome improved. The effects of internal communication are not straightforward. Internal communication provides the organisation members with common informative ground, increases work motivation, and has an effect on work satisfaction and climate of the work place. All these factors influence work productivity. (Åberg 1996, 196 - 197.) In the project the organisation's outcome cannot be compared because the project is a unique activity creating something new. The projects can only be compared to other projects. The criterion for the success of the project has to be found elsewhere.

**RQ9            How could the communication practices of the project PM have been improved?**

The aspects of communication that the respondents would have liked to improve included the issues related to communication technology, the arrangements of meetings and the amount and type of information distributed. The suggestions for improvements were practically oriented, there were no comments referring to conceptual level of the project management or implementation. Most of the issues that came up were directly related to improving the effectiveness of the work. This also reflects the high level of commitment of the respondents. The amount of social activities was the only issue that was mentioned which was not related to work. Even when more social activities were required, the underlying reason seemed to be to increase the motivation of the participants. Good relationships in personal level were seen to contribute to working relations.

The suggested improvements mostly dealt with making the communication channels faster and more effective. The expressed need for distributing more detailed, formal, written and regular information about the status of the project and of different areas of the project confirms the results of the significant information gaps that existed in the project. In the interviews also the representatives of the management level and of the core group of the project felt that not enough information had been available on the issues related to project especially to those individuals who were not a part of the inner circle of the information distribution. This indicates that the supervisors were aware of this shortcoming of the communication. In the project PM being informed seemed to be a question of one's own activity. One link of communication of the project received special attention, the communication between the client/ the consultant and the suppliers. The existing instructions were not viewed to be sufficient. A need for more detailed and precise instructions was expressed.

The suggested improvements for the communication of the project PM were practical, dealing with the working conditions and emphasising the need for clear instructions in document exchange that is one of the key areas of the project. Also the relational aspect of the project received attention, suggesting that it should have been more active than it was in PM. Apparently the heavy workload and the long hours limited the activity of the social life of the project.



## **RQ10      What is effective communication in a project?**

There is a direct relationship between effective team communication and project success (Thomas et al. 1999, 15.) In this study the effectiveness of communication is evaluated through the level of communication satisfaction, efficiency of channels and other factors that impact effectiveness like conflict handling, communication climate, motivation level, quality of management and the quality and effectiveness of instructions of communication.

In this study communication satisfaction measures the overall successfulness of the communication of the project. It is also an indicator of effectiveness to the extent that if the organisation members are satisfied with the communication there is no hindrance to effectiveness in that respect. The results regarding the communication satisfaction indicated that the organisation members of the project PM were satisfied with the communication of the project.

Another indicator of effectiveness is the efficiency of channels. Effective communication channels are regarded as a precondition to overall effectiveness of communication. The results indicated that the channels were working as there were no significant gaps but on the other hand, there were severe information gaps so the organisation members did not receive all the information they needed.

Disagreement handling is an important factor that has an impact on group effectiveness. Unresolved conflicts may lead to the disintegration of the group and even minor conflicts can deteriorate the climate and decrease effectiveness. The results regarding the conflict handling indicated that the conflicts of the project mainly involved technical issues, time schedules or other directly work related matters and that those conflicts were solved in mostly good spirited and professional manner. The conflicts did not affect the personal relationships. The only situation where personal relationships were involved was within the project team of the client and it was also handled within the organisation. All things considered, the conflict handling of the project was according to the results effective, conflicts were not allowed to get in a way of accomplishing the goals.

An issue that is related to both communication satisfaction and effectiveness is communication climate. Ideally the communication climate is motivating and inspiring to the organisation members thus contributing to the levels of satisfaction and work performance.

The communication climate of the project was described in the interviews as task-oriented, work-oriented, professional, open, serious and committed. A project is an organisation focused on accomplishing its task within the given timeframe. In the project PM the project organisation was relatively small, considerably smaller than in PM1 for example. In practice this meant that there was so much work that the people did not have much time for concentrating anything else but work. The organisation members, especially in the site organisation, were highly motivated and committed to the project and its objectives which contributed to the overall success of the project. It seemed that the climate of the project was not motivating as such, but provided the organisation members with a focused and committed atmosphere where the common goal was the unifying factor. In the external level, the open and supportive communication climate between the organisations contributed to the overall effectiveness of the communication in the project.

The basis for motivation varied between the respondents; with many the motivation was internally driven. For some the motivation was directly related with the project itself. According to Dinsmore and Benitez Cudas (1993, 462 – 463) in multicultural projects one way of motivating the project team is to create a *project culture* that suits the objectives of the project and the group's culture. The purpose of creating such a culture is to obtain co-operative spirit and create a feeling of *our project* within the team. Within the site organisation and more specifically the core group the project culture appeared to exist. The co-operative spirit appeared to be strong, the respondents referred to their team and to their common goal.

Organisational effectiveness depends to a certain extent on how power is exercised. The management received quite varied evaluations in the interviews. On the other hand, the topic was not very thoroughly discussed in the interviews since many of the interviewees were a part of the management. In the communication satisfaction part the results involving the supervisors were positive so the problem was thus not in the supervision but more in the way the management was arranged. The critical issues of management dealt with delegation of responsibility, the amount of feedback and equal appreciation of the disciplines. According to Richmond et al. (1986, 181) the use of power that is based on reference and expertise is likely to be linked with high satisfaction and improved performance. In the project work the power of the consultant is based on reference and expertise. The reference and the expertise were also the reasons for the project manager of the main consultant to receive his exceptional position in the project PM.

The internal communication instructions of the project are more of a guideline and the actual practices are moulded through the work and the experience of the individuals. The comments regarding the instructions of the external document exchange showed that the instructions could be improved in many ways but it would be very time consuming and thus it has not been done.

Effective communication contributes to organisational effectiveness. According to the traditional view internal communication activities determine the overall effectiveness of the organisation. The more integrated the organisation members are the greater will be the efficiency. According to Åberg (1996, 196) an effective internal communication system can be characterised by informative messages, data banks and by users who know where to find the information they require. Other factors that are related to organisational effectiveness are task-related activities, socio-emotional factors and innovativeness.

Thamhain (1993, 254) named barriers and drivers of project team effectiveness. The barriers are: unclear project objectives and directions, insufficient resources, power struggle and conflict, uninvolved and disintegrated upper management, poor job security and shifting goals and priorities. In the project PM the project plans and targets were clear according to the results on channels efficiency. The resources seemed to be sufficient in the project, the conflicts did not present a problem, the management was never described as disintegrated or uninvolved nor were the goals and priorities shifting. At least when it came to the core group of the project organisation there did not seem to be any barriers to effectiveness. The job security is well established among the core group whereas those organisation members who are only hired for the project only do not stand on such a solid ground.

The drivers of team performance are: professionally interesting and stimulating work, recognition of accomplishment, experienced project management personnel, proper technical directions and leadership, qualified team personnel and professional growth potential. (Thamhain 1993, 254). It was obvious on the basis of the results that the motivation was really high among the respondents. The feedback was an area that could have been improved as many respondents stated that they felt they did not receive enough recognition or feedback. The project management personnel were very experienced on the consultant side and the team personnel was qualified. The experience would also indicate that the technical directions and leadership were also proper even though that area was not directly discussed in the interviews.

The project had an aspect of professional growth potential for many of the people involved as it was stated that the reference of the project alone motivated many of the people.

Thamhain (1993, 254) also classifies the characteristics of high-performance teams. The task-related qualities include commitment, result-orientation, quality and the ability to anticipate trends and problems. Effective communication, high motivation and good team-spirit are people-oriented qualities. When these characteristics of high-performance teams and the drivers of performance are compared with the communication of the project organisation team it could be assumed that the project organisation team PM was a high-performing team. The site organisation was in core position in the project and it was undoubtedly a high-performing team. The study was concentrated on the site organisation so on the basis of the results conclusions can be mainly drawn about the site organisation.

Cultural differences, if viewed as annoyances or barriers may inhibit the effectiveness of a multicultural team. If the differences are regarded as alternative ways of understanding and implementing the work of the team, the capacity of the team is enhanced. (Berger 1996, 107 – 108). In the project PM the cultural differences were in no way seen as annoyances or barriers. Some did not admit cultures having any impact on the work and others thought the multiculturalism was beneficial to the project. It can be assumed that the multiculturalism of the project did not enhance the capacity of the team as such but it did not hinder the effectiveness either. After all, as Berger (1996, 107 – 108) says, the effectiveness is determined by the individuals and not cultures since there are both effective and counterproductive individuals in all cultures.

Eisenberg and Phillips (1991, 256) argue that definitions of effective communications are actor-bound, time-bound and culture-bound. So who else but the organisation members of PM know best what effective communication in a project is? According to the respondents effective communication in a project is fast, fluent, open, clear, detailed and it needs to follow the instructions and guidelines. The basis for effective communication is careful preparation, teamwork, the clearness of roles and responsibilities and a common definition of the objectives and rules.

In order to conclude this chapter and to summarise this research some final conclusions were made. On the basis of the results and the literature it can be argued that in the context of a

multicultural project there are several factors that contribute to effective communication. The following characteristics describe effective communication in a project:

- Open and supportive communication climate that advocates commitment, result-orientation and teamwork
- A strong project culture that unifies the project team
- Effective communication channels that deliver all the information required accurately without delays
- Informal and immediate channels of communication that guarantee the fluent information exchange
- Clear objectives of the project
- Clear roles and responsibilities and organisation structure
- Effective conflict solving that prevents conflicts from getting serious
- Experienced management and supervision who provide enough feedback
- Clear and detailed instructions that are also followed
- Open-minded attitudes towards other cultures recognising the beneficial elements
- Effective, competent and motivated individuals

The project PM was a multicultural project. The cultural element influences the communication of a project in many ways. To summarise the findings of this research and literature it can be argued that the multiculturalism has an effect on

- Organisational climate of the project and thus also the communication climate
- Communication practices and choices of strategies
- Interaction patterns and the social side of the work

When a project organisation is formed, the organisational climate also forms. In the case of PM, the climate was adapted from the client mother organisation. Creating a climate that is distinctive and identifiable is important in creating a team of the project organisation. In the climate the beneficial elements of multiple cultures working together can become evident. The potency of different approaches and different strong points may add up to benefit all.

The culture influences the communication practices and choices of strategies in both the organisational and in the individual level. In inter-organisational contacts the cultural factor needs to be taken into account, even more so than in interpersonal contacts. According to the results of the research the cultural differences were more evident in the inter-organisational

relation than in the personal contacts. Once people get to know each other the cultural factor becomes less important.

Culture is more present in interaction than in the actual work, in the operational tasks. The culture affects the level of formality, the level of hierarchy, emotion expression and the way contacts are made and maintained. Culture also affects the way how rules and norms are perceived and how carefully those rules and norms obeyed. All things considered, the cultural factor seemed to influence the communication in the project in all levels, more significantly in some than in others. What is clear is that the cultural element was present in all the communication and in the relations between the organisations and the people even though the importance of it may have diminished in the interpersonal contacts once people got to know each other better.

What seemed to be an important factor that affected the perceptions and understanding of different cultures was the previous experience and knowledge of intercultural encounters. The less experienced individuals were likely to notice cultural differences but the analysis of the underlying reasons of different kind of behaviour remained stereotypical. The more experience an individual had, the more skilled they were in taking into account the cultural factors and adjusting their own behaviour and communicative strategies to accommodate themselves to the situation.

An additional objective of this research was to describe the day-to-day communication of the project. The project was a joint venture of several companies. The different parties of the project differ in their roles and relationships. The client and the consultant formed in the case of PM a team whereas in other projects the consultant remains more separate. A project organisation is best described by its focus on the task outcome and limited life span. Issues that might come up in a static organisation as the creation of communication system or establishing an organisational culture are put aside in a project where the solutions need to be fast and even some inconveniences are more easily tolerated because of the temporary nature of the organisation. The structure and the communication develop on the basis of how the rules and the responsibilities are defined. The consultant contributes to the information exchange system by introducing an existing model and guidelines. The communication of a project is controlled by many things, most importantly by the contracts. The work and the communication in a project vary according to the stage of the project. The personnel of the project also changes according to the stage, basically only the core group of the project

remains the same during all the project. Many individuals only come along to do a certain task in a certain phase.

What is day-to-day communication in a project is not as easily established as it changes during the project and depending on the position and organisation of a person. Especially at the site the different stages are clear and have most effect on the daily communications. The biggest change in the communication is the change in the intensity and the formality, the communication becomes more intense and informal towards the end of the project. In the beginning the relationships are not as established and also the during the contract negotiations it is better to keep the communication as formal as possible in order to avoid misinterpretations. Later on the informal nature of the communication relationships guarantee the direct contacts which are fast and fluent. The informal nature of the communication relationships seems to be an idealistic result of successful communication practices of a project. Once the relationships are informal the contacts are direct which are also the most effective way of dealing with things since the direct contacts are also viewed as the most reliable ones.

## 8. EVALUATION OF THE STUDY

There are many potential pitfalls in the research of intercultural communication compared to the intra-cultural study. According to Johnson & Tuttle (1989) there are problems in the research of intercultural communication in six levels: theoretical problems, methodological problems, problems with gathering the data, problems in the infrastructure of the research, problems with the results and with the analysis. When there are more than one culture involved in a research, it can be said that with data gathering everything that could possible create problems will most likely also create problems. Nothing should be taken for granted. (Johnson & Tuttle 1989, 475 – 476.)

In this study no greater difficulties existed in the data gathering or in conducting the study. The greatest disappointment was the low answering percentage of the questionnaires. The informing and motivating the respondents should have been done more carefully. On the other hand, probably the motivating of the respondents was sufficient as the project manager took care of the contacts to the corresponding organisations personally. The hectic schedules of the project maybe affected the answering percentage. The returning of the questionnaire should have been controlled better. The low answering percentage is a typical shortcoming of the method and not easily solved. The questionnaire was relatively heavy in this case so it could be argued that a questionnaire that could have been more easily and faster completed would have received a better percentage.

Once the methods are compared, the method of interview was more successful than the questionnaire. The interviewees were eager and interested to talk about their work and issues related to it. In the interviews, the interviewer had space to manoeuvre and to concentrate on those issues that seemed to be the most important ones in each case. Each interviewee had his/hers own approach and perspective on things. The interviewees were also likely to emphasise and be concerned about different things. The interviewer also felt that the direct contact to the respondents that was possible in the interviews was motivating to the respondents in a way that questionnaires sent by mail can never be.

The interview guide fulfilled its objectives and was a usable tool (see appendix Interview guide). All the questions of the guide were more or less open and general. The structure was designed as such in order to leave the interviewer room to emphasise those issues she viewed important and also to clarify the issues and topics to the interviewees thus keeping the



situation more like a conversation. It was not desired that the interviewees would simply read the questions from the guide and then answer them. The questions three and four, about decision-making and day-to-day communication were probably too general in their approach but on the other hand, as the interviewees differed from each other in their positions and responsibilities, a more precise questions would not have been functional either. It was not practical or purposeful for this research to go to such detail in the job descriptions of the individuals, it was more important to be able to form an overall picture of the communication practices of the project as a whole.

The questionnaire had questions that were designed to supplement and to verify the information received from the questionnaires and questions that were designed to collect new information. The latter ones received more attention in the interviews as the topics of the questionnaire were already familiar to the interviewees and did not need much clarification. The supplementing and verifying function of the interview in addition to collecting new information worked well, especially as the answering percentage was so low. It was conforming to find out that the results of the interviews did confirm the results of the questionnaires. Still, the interview was the method to give the richest and most complete information about the project PM and its communication practices. All in all, the interviews proved to be an excellent choice of methodology and at the end much more informative and fruitful than the questionnaires. Together the methods provided the research with an extensive data, with both quantitative and qualitative, even though the amount of quantitative data should have been a bit greater.

The questionnaire had a feedback section at the end. Interestingly the feedback was answered by most of the respondents and it thus received the highest percentage of answers compared to others parts of the questionnaire. All the questions except the question 4 (*I did not understand all the statements/questions*) were answered by 55 respondents of 56 respondents. 54 respondents answered question 4. 64% of the respondents agreed with Q1 that the *questionnaire was easy to fill in*. 65% of the respondents did not think that *the language used in the questionnaire was difficult*. 80% agreed with Q3 stating that *investigation of these topics was important*. 67% of the respondents *understood all the statements and/or questions used in the questionnaire*. 69% of the respondents were *motivated in answering the questionnaire*. 89% of the respondents thought that the *project PM had been successful* and 76% felt that the *communication of the project had been also successful*

What can be concluded from the feedback section of the questionnaire is that the ones who bothered to fill in the questionnaire felt that investigation of these topics is important and that they were motivated to take part in the research. It appears to be so, since they did complete the questionnaire. 36% thought that the questionnaire was not easy to fill in, 35% thought that the language used in the questionnaire was difficult and 33% of the respondents did not understand all the statements and/or questions used in the questionnaire. This indicates that the questionnaire should have been further modified to be more respondent-friendly, to be more simplistic. Apparently the language skills of the respondents varied a great deal. According to Gudykunst (1989, 299) problems in data gathering can be avoided by guaranteeing that the respondents can operate in their mother tongue during the testing and that the concepts used are linguistically equal. In this kind of research, in this level and in the context of a multicultural organisation guaranteeing the use of mother tongue is simply impossible. The language used in the questionnaire was English because that was the official language of the project and it was expected that all the respondents were fluent enough in the language. The question of languages is always tricky in this line of research and it certainly is an issue to be considered. Even though the situation of this research was not idealistic in all the aspects, the research went according to plan and there were no obstacles that would have been a hindrance to the research.

The most interesting piece of information offered by the feedback is that almost 90 % of the 55 respondents felt that the project PM had been successful whereas only 76 % felt the same way about the communication. The majority felt that the both were successful but still there were some that did differentiate between these two, indicating that even though they were happy with the outcome of the project as a whole, they were not as satisfied with something very fundamental in project work, the communication.

Gudykunst et al. (1989), Dissanayake (1989) and Johnson & Tuttle (1989) have presented guidelines to avoid problems in studying intercultural communication. Problems in theoretical level can be avoided by getting acquainted with the culture in question in as many levels as possible. After being familiarised to the culture, the researcher should try to understand communication from the point of view of a native from that culture. (Dissanayake 1989, 110.) In this study the researcher was well acquainted with two of the cultures involved and also relatively familiar with the project in question and in project work in general. The project manager of the consultant was a kind of a native in explaining the practices of the project

work. The assistance was important for the understanding the jargon of the interviewees when the project was discussed.

In the case of studying many cultures problems in methodology can be solved by forming the meanings of the studied phenomenon in each culture separately. Once this is accomplished, the meanings should be integrated to a single indicator that is pre-tested in all of the cultures included in the research until the indicator proves to be valid. (Gudykunst 1989, 227.) Pre-testing the method in the host culture measures the reliability of the indicator. Another way of avoiding the possible errors and surprises is to use triangulation in data gathering, to use various methods to collect data. (Johnson & Tuttle 1989, 471.) In this study the project specific issues were discussed with the project manager of the main engineering consultant to make sure that the issues and topic areas were relevant to this project. No separate pre-testing was done with the methods. Two methods were used in order to verify the data.

When analysing the results, it should be noted that other things could cause the results that seem to indicate cultural differences. The differences in results may be explained by differences in methods of answering, differences in familiarity of the stimulus, differences in interpreting the testing situation, differences of socially acceptable answers or differences in motivation to answer/ to act in the testing situation. Also the differences may be caused by the different reactions the conductor of the research has had towards the respondent or by difficulties the researcher has had in interpreting the data. (Gudykunst et al. 1989, 223.)

The main issue of this study is that so many different topics were handled in a single study. It could have been more fruitful to concentrate in a more carefully defined aspect of the communication and study it more deeply. On the other hand, as the objective was to evaluate the successfulness of the communication it would not have been possible to only look at one side of the communication. In this case it was thus justified to take a look at many aspects of communication on a more superficial level. To conclude, the study fulfilled its task and met its objectives.

## CONCLUSION

The project PM is completed and it has been regarded as a successful project. The main consultant reviewed the project within their organisation and the evaluations of the project and the individuals were mostly very positive. So how was the communication of the project? The communication and the overall successfulness of the project are not separate issues so if the project was considered having been successful so must have been the communication. And that it was on the basis of this study.

Communication satisfaction was one of the indicators of successfulness of the communication. If the organisation members are satisfied with the communication, the communication has been successful to the degree that it has met the expectations of the individuals. The results showed that the respondents were relatively satisfied with the communication. The results also showed that there were no major shortcomings in the communication of the project.

Another indicator of the successfulness was the channels efficiency. Successful communication requires the effective functioning of the channels. The results showed that there were no channel gaps in the communication of the project but there were information gaps that appeared to be the greatest limitation of the communication of the project PM.

The results regarding the successful and not so successful aspects of the communication indicated that the individuals were most content with the communication climate and the relational aspects of the project whereas issues that needed to be improved had more to do with practical arrangements of the work. In the overall evaluations the communication was regarded very successful by most respondents, as was the project. In the evaluations of effectiveness it was also concluded that the communication of the project was effective especially within the site organisation, which was concluded having been a high-performing team, fulfilling all the characteristics of one. All these aspects indicate that as a whole the communication of the project PM was successful.

Communication is unquestionably one of the key factors of a project and a contributor to its success. What seems to be a critical on the basis of this study is how to ensure the effective functioning of communication in the project. A solution is to form such a foundation for the project that would give the communication every chance of succeeding. This foundation

should be formed in the very beginning of the project, preferably during the pre-engineering phase or even earlier before the work becomes more interactive and inter-organisational. Many interviewees pointed out the importance of personal relationships in making the communication more informal. Informality and good relations among the people and organisations allow direct contacts and guarantee a certain fluency in the everyday work. A project manager that took part in the study stated that forming a good, open and supportive communication climate is one of the most important tasks of the project management, making the work pleasant and enabling open discussion. If the climate is good, there is likely to be fewer conflicts at least on the personal level and even if conflicts appear, they should be solved more easily.

In the project PM, the key personnel of the project organisation took part in a seminar in the early stage of the project. The project team of the consultant had their own seminar emphasising the importance of communication and then the whole project team, the teams of the consultant and the client had a seminar of teamwork together. Those interviewees who took part in the seminar thought that the seminar had had a positive influence on the project communication.

Forming the strong foundation for the communication of a project is a task of the project management. Building the accurate frames for the communication of the project team is one precondition for the successful implementation of the project. The studies have supported the following recommendations for the practising manager or consultant to get the best possible outcome from their subordinate groups. First, organisational groups require motivated members for satisfactory task progress. When forming organisational work groups the management should either recruit those individuals who are clearly interested in the goals or purposes of the group or put a special effort in motivating the group members by explaining how group decisions will affect group members directly and indirectly. Second, organisational groups require sufficient time and informational resources for satisfactory task progress. Third, organisational groups need a competent leadership for satisfactory task progress. Fourth, organisational groups need direct organisational assistance for satisfactory task progress. Groups require training to ensure that group members have the knowledge and the skills that are necessary for completing the task. An organisation should also be ready to minister situation-specific assistance in case the group encounters problems that were not addressed during the training. Groups should also be able to identify situations that require additional assistance and be willing to ask for it. (Hirokawa & Keyton 1995, 442 – 443.)

The key elements that contributed to the successfulness of the communication of the project PM were on the basis of the research efficient channels, good climate and relations between people and organisations, effective and motivated key personnel and a careful preparation of the whole project. The conclusions drawn in this study regarding the effective communication in a project can be applied as recommendations for creating the best possible foundation for the communication in a project. These characteristics of effective communication in a project should also guarantee the successfulness of communication and contribute to the overall performance of the project team:

- Open and supportive communication climate that advocates commitment, result-orientation and teamwork
- A strong project culture that unifies the project team
- Effective communication channels that deliver all the information required accurately without delays
- Informal and immediate channels of communication that guarantee the fluent information exchange
- Clear objectives of the project
- Clear roles and responsibilities and organisation structure
- Effective conflict solving that prevents conflicts from getting serious
- Experienced management and supervision who provide enough feedback
- Clear and detailed instructions that are also followed
- Open-minded attitudes towards other cultures recognising the beneficial elements
- Effective, competent and motivated individuals

An important element of this research was the culture, the multiculturalism of the project. It was concluded that the multiculturalism influenced the communication of the project in many ways, the organisational and the communication climate, the communication practices and choices of communication strategies in both organisational and individual level and the interaction patterns and the social side of the work. Moreover, the cultural element was present in all the levels of communication from organisational to interpersonal and intrapersonal to the extent that the organisation members had to consider the effect of culture on their own behaviour.

The conclusions drawn in this research could be seen to have an applicable value to the research of communication and organisational effectiveness in a larger scale. The work method of project is more and more typical nowadays, it seems that a big part of all the work

is done in a form of projects. The characteristics of effective communication in a project that concluded on the basis of this research and the literature reviewed should apply also to other contexts, to contexts where a group of people have a common task and objective and a limited time to achieve those goals. The cultural element is more complex. Surely the culture will affect the communication but the actual effect depends on various factors. What seem to be crucial are the attitudes towards cultures, the previous knowledge and experience of other cultures and the level of intercultural competence. For any multicultural organisation or a work group it would be beneficial to improve the sensitivity in noticing the cultural elements. Only by knowing and noticing the cultural elements they can be taken into account and managed.

This study handled the communication of the project in a quite general level. In the literature projects are much discussed within organisational sciences but in the field of communication it has not received as much attention. Communication in a project context and in multicultural project context has many distinctive features that deserve to be looked into. Especially studies of multicultural projects truly have applicable value in today's global world where projects are such a popular method of work. The training of multicultural project management seems to be a growing area in the training business. Making their projects work is crucial to companies, big investments are involved and the need to succeed is fundamental.

Project is a context of communication that deserves to be studied further. It is surprising how little study has been conducted of the topic. On the basis of this study it can be argued that a project, even more so when multicultural, is a somewhat special context that differs greatly from typical organisational context. A project context represents different needs and demands for communication, the priorities and the emphasis are different. Once the context is also multicultural, the situation is even further altered. What should be done is to establish the communication context of a project and of a multicultural project through extensive comparative research that would compare and study various projects. Although this research was a rather limited peek at the multicultural project communication through single case, on the basis of the results various elements and factors of successfulness were identified. On a basis of a more extensive study that would include various project organisations, much more valid conclusions could be drawn.

The project management is in a key position when it comes to the successfulness of the project. The project management would also be an interesting subject for future research. To

focus on the management level of multicultural projects would surely clarify the varying communication practices of different projects. The relationship of the management, of the top management and of the immediate supervisors and subordinates is a subject that has been studied at length in organisational and in communication sciences. It would be interesting to view those relationships in the context of a project.

Multicultural project is an important and inspiring topic of a research. In future research the multiculturalism should receive more attention than for example in this study. More detailed information should be collected about the effects of multiculturalism on the communication of the project. This kind of information as any information about multicultural projects has definite applicable value on both the theories and to practice. This research was a kind of an introduction, an overview of issues that should be more carefully looked into, of issues that deserve to be analysed to a greater detail.



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Figure 1

The structure and lines of communication in project PM

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## *Appendix Cover letter*

28<sup>th</sup> April, 2000

*Name of the company*

*Attn: Mr/ Mrs/ Miss/ Ms X*

*Address*

Dear Mr / Mrs/ Miss/ Ms X,

I am enclosing the material as we agreed by phone.

As You know, one of the key elements of a successful project is the effective communication flow between the different participants of the project. This study is designed to give information on various sides of communication in order to give an overall picture of the communication inside this particular project.

There are many organisations and individuals in this project working towards a common goal and I would like to know through the results of this study how the different organisations and individuals experience the communication.

We are now using new methods of information transfer, namely e-mail for correspondence and technical documentation. Through this study we will find out how effective these new methods have been and if there is something that we should improve.

One of the main objectives of the questionnaire is to find out how the information channels are functioning and how do the different organisations and individuals get the necessary data.

In the second phase of the study, some key informants will be interviewed in order to gain deeper knowledge of the communication practices in the project and to clarify some actual problems or other issues that the results of the questionnaire have brought to our attention.

Our work in the project business is continuously changing and thus we should be able to detect those changes and to benefit out of them. For this reason I am asking your contribution to this study by distributing the questionnaires enclosed (x) in your organisation to those individuals who participated to the PM project and to make sure that answers are sent within one week to the project office of PM. The questionnaires are to be distributed and returned in envelopes.

I will make sure that the results will be sent to You. We may need to discuss the results, if not earlier, then by the time we start our next project together.

Thank you,

*Project Manager*

*Main engineering consultant*

Enclosure (1)



## *Appendix Motivation letter*

28<sup>th</sup> April, 2000

**Dear participant of the project PM,**

You have been chosen to take part in the research that the main engineering consultant has taken the initiative to conduct about communication of the project PM. Your contribution to project has been vital and you have a valuable insight to the communication practices of PM.

As you know, one of the key elements of a successful project is the effective communication flow between the different participants and organisations of the project. The main objective of the research is to find out how successful and effective the communication of this project is and has been.

The research is divided into two parts. The first part, a more general inquiry of the communication is being sent to you now. Later on, some members of the project organisation will be interviewed in order to get more specific information on the key issues. The interviews will be partially based on the information received through these questionnaires, so do take the opportunity to express your opinions. The results of this research will be reported during autumn.

The aim of this questionnaire is to describe the communication of the project PM in general. A vital part of that successfulness is how each individual perceives the communication of the project. The part A aims to find out how satisfied you have been with communication in this project. In part B you are asked to evaluate the communication in a more general level in order to point out the main shortcomings in the communication. Parts C and D deal with various communication channels used in this project. Parts E and F deal with different information topics. The answers should reveal the relationship with the information you receive and the information you would like to receive. The final part, part G gives you the chance to give feedback about the successful and not so successful aspects of the communication of this project PM through some open questions.

So in short, through this questionnaire we hope to find out how effective and satisfactory the communication practices of this project PM are and have been and what suggestions you might have for improving them. Completing the questionnaire takes about 40 minutes of your time. Thank you in advance for contributing to this research and thus to this project PM.

The answers are completely confidential and will be combined into groups for reporting purposes. Please be sure to answer to all the parts and to each item. After completing the questionnaire please enclose it to the envelope and return it to your organisation's contact person.

Thank you,

Project Manager  
Main engineering consultant

## BACKGROUND INFORMATION

### 1 What organization do you belong to?

- Client  
 Main engineering consultant  
 Civil engineering / Suppliers

### 2 What is your main activity?

- Project manager /coordinator  
 Chief designer /Area chief designer /Designer  
 Construction /Erection management /supervision  
 Administrative and supportive activities

### 3 What is your nationality?

- Portuguese  
 Finnish  
 German  
 Swedish  
 Other, what \_\_\_\_\_

## PART A

### Satisfaction with the communication of the project PM

Evaluate each statement with a scale from 1 to 7 where

1 – very satisfied, 2 – satisfied, 3 – somewhat satisfied, 4 – indifferent, 5 – somewhat dissatisfied, 6 – dissatisfied and 7 – very dissatisfied

Please indicate how satisfied you are with the following aspects of the communication of the project PM:

	1	2	3	4	5	6	7
A1 Formal communication of the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2 The way the meetings of the project are organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A3 Quality of the written directives and reports of the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A4 Information about how the problems in your job are being handled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A5 How motivating the communication of the project is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A6 Information you receive about the requirements of your job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A7 Informal communication in the project organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A8 Interaction with the other members of the project organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A9 Communication of your work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A10 Information about how your job compares with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A11 Information you receive from the top management of the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A12 Communication practices of the top management of the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A13 Information you have been given about your progress in your work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A14 Your supervisor's level of knowledge and understanding of the problems that you face	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A15 Communication of your supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A16 Level of trust you share with your supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A17 Guidance your supervisor offers for solving job-related problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A18 Your supervision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A19 Information about how you are being judged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A20 Recognition you receive from you efforts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A21 Project organization members abilities as communicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A22	Attitudes towards communication in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A23	Timeliness of the information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A24	Appropriateness of handling the conflicts through the proper communication channels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**If you have subordinates, please answer. Otherwise, proceed to part B.**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
A25	Your subordinates responsiveness to directive communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A26	The way your subordinates anticipate your needs for information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A27	Amount of information you receive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A28	Your subordinates when it comes to their receptiveness to evaluation, suggestions and criticism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A29	Amount of initiatives your subordinates take to communicate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **PART B**

### **Main shortcomings in the communication of the project PM**

Evaluate each statement with the scale from 1 to 7 where

1 – strongly agree, 2 – agree, 3 – somewhat agree, 4 – indifferent, 5 – somewhat disagree, 6 – disagree and 7 – strongly disagree

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
B1	Information is not easily available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B2	The responses I get for the information I give are not sufficient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B3	Information I receive is out of date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B4	It is difficult to work in a foreign language.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B5	Information comes as a rumor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B6	Information I receive is inaccurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B7	Information I receive is useless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B8	I cannot freely express my opinions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B9	Language used in communication is difficult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B10	My opinion is not heard.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B11	I receive too much information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B12	Information does not reach me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B13	Management does not tell about important issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B13	Management does not know what others think.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B15	I do not receive enough feedback.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## PART C

### Information received from channels

Evaluate the amount of information you receive from each of the channels with the scale of 1 to 5 where 1 – very little information and 5 – a lot of information. If you do not receive any information from the channel, tick 6.

		1	2	3	4	5	6
C1	Immediate supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C2	Other supervisors/management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C3	Co-workers in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C4	Internal project newsletters/memos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C5	Project meetings/negotiations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C6	Project contract negotiations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C7	Project briefings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C8	E-mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C9	Project team meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C10	Project management briefings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## PART D

### Information desired from the channels

How much information would you like to receive from each of the channels? Evaluate the amount of information you would like to receive from each of the channels with the scale of 1 to 5 where 1 – very little information and 5 – a lot of information. If you do not wish to receive any information from a particular channel, tick 6.

		1	2	3	4	5	6
D1	Immediate supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	Other supervisors/management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D3	Co-workers in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D4	Internal project newsletters/memos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D5	Project meetings/negotiations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D6	Project contract negotiations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D7	Project briefings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D8	E-mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D9	Project team meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D10	Project management briefings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## PART E

### Information received about issues in the project PM

Evaluate the amount of information you receive about the issues related to the project with the scale of 1 to 5 where 1 – a very little information and 5 – a lot of information. If you do not receive any information about a particular issue, tick 6.

	1	2	3	4	5	6
E1	Your own work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E2	Changes in production and work methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E3	Training and courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E4	Social activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E5	Project products and services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E6	Organizational changes in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E7	Project plans and targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E8	Plans and targets of your project team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E9	Customer expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E10	Topic issues of your project discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E11	Plans and targets of other project disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E12	Drawbacks and accomplishments in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E13	External factors that affect the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## PART F

### Information desired about the issues in the project PM

How much information would you like to have about the issues related to the project? Evaluate the amount of information you would like to receive about the issues with the scale of 1 to 5 where 1 – very little information and 5 – a lot of information. If you do not wish to receive any information from a particular issue, tick 6.

	1	2	3	4	5	6
F1	Your own work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F2	Changes in production and work methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F3	Training and courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F4	Social activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F5	Project products and services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F6	Organizational changes in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F7	Project plans and targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F8	Plans and targets of your project team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F9	Customer expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F10	Topic issues of your project discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F11	Plans and targets of other project disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F12	Drawbacks and accomplishments in the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F13	External factors that affect the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**PART G**

**The successful and not so successful aspects of the communication of the project PM**

**G1 In your opinion, what has been successful in the communication in this project PM?**

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**G2 In your opinion, what has been not so successful or has even caused inconvenience to your work in the communication of this project PM?**

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**G3 How would you improve the communication practices in the project PM?**

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**Thank you for your contribution.**

**Please give feedback about the questionnaire.**

Evaluate each statement with the scale from 1 to 7 where  
1 – strongly agree, 2 – agree, 3 – somewhat agree, 4 – indifferent, 5 – somewhat disagree, 6 – disagree and  
7 – strongly disagree

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1 The questionnaire was easy to fill in.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 The language used in the questionnaire was difficult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 I think it is important to investigate these topics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 I did not understand all the statements/questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 I was motivated to fill in this questionnaire.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 I think the project PM has been successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 I think the communication of PM has been successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## INTERVIEW GUIDE

- 1 Background information
  - What organisation do you belong to?
  - What is your main discipline?
  - What is your nationality?
- 2 Describe your position in the project.
  - What are your main responsibilities and duties?
  - With whom or with what positions do you regularly communicate?
- 3 Describe the way decisions are made in the project.
  - What decisions do you normally make?
  - What information do you need to make these decisions?
  - Where do you get this information?
- 4 Describe your day-to-day communication in the project.
  - Do you receive many requests for information?
  - Do you need to request information to do your job? What kind of information? Why don't you receive it routinely?
- 5 Describe the communication between
  - Client – Consultant
  - Client – Supplier
  - Consultant – Supplier
  - Are there important differences between communicating with people belonging to different organisations?
  - Are there important differences between communicating with people from different cultures?
- 6 Describe the formal channels through which you typically receive information. What kinds of information do you tend to receive? How often?
- 7 Describe the informal channels through which you typically receive information. What kind of information do you hear? How active is the informal communication?
- 8 What channels have been the best at keeping you informed of the day-to-day operations and happenings in the project? Would you prefer some other channels?
- 9 Have there been any significant changes in the communication patterns in this project since it began?
- 10 What have been the most positive things about the communication of this project?
- 11 What has been negative about the communication of the project?
  - Can you see any unresolved problems in the communication of this project?
  - How would you like to improve the communication of the project?
- 12 If a conflict occurs, how is it resolved? What might cause a conflict in the project?
- 13 How would you describe the general communication climate of the project?
- 14 What do you think is motivating people in the project? What would you say are their principal concerns? How do the communication practices relate to their needs and concerns?
- 15 Describe the chain of command in the project and how it operates.
  - How would you evaluate project management's communication?
- 16 Are there any instructions for communication practices in the project? If there are, how do the instructions work? Are they used? How would you define effective communication in the project?
- 17 Do you think that the communication in a project is different from communication in another, more static organisation? If so, how is it different?
- 18 Is there anything else that you would like to say about the communication of this project?

Organisational chart of the site office of the project PM

