FFI RAPPORT

PART I: ALLIED WARRIOR 2004 - PILOT STUDY AND ANALYSIS OF CROSS-CULTURAL ORGANIZATIONAL ISSUES

BJØRNSTAD Anne Lise

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8) **ABSTRACT**

FFI-project 879 Network Based Defense in Operations aims to increase the understanding of the transformation of the Norwegian Armed Forces toward NBD, including both theoretical and empirical examinations of the concept, linked to both the technological and the organizational development.

This report presents the analysis of the organizational processes in a NATO Headquarter (HQ), based on the data collected ate the NATO exercise Allied Warrior 2004 (AW04). (A part II of this report will focus more on the cross-cultural issues linked to the organization and cooperation.) Secondary to the analysis is also a methodological description of the development of the organization-focused questionnaire employed in the data collection.

Topics covered in the analysis are, information-sharing, decision-making, language, organization, group roles and processes, social identity, and culture. There are analyses of both quantitative and qualitative data included. The results of the analysis provide some preliminary insights into the organizational processes linked to the cooperation in a multinational headquarter. The organizational questionnaire employed proved to be useful and is deemed to be of value also for further research in this area.

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1 INTRODUCTION

FFI-project 879 *Network Based Defense in Operations* (NBD-O) aims to increase the understanding of the transformation of the Norwegian Armed Forces toward NBD[1]. The project focuses on theoretical and empirical examinations of the concept, linked to both the technological and the organizational development. Included in this work is also an analysis of the consequences for cooperation in military operations both nationally and internationally. This overlaps with some of the aims of the NATO Concept Development and Experimentation (CD&E) project *Leader and Team Adaptability in Multinational Coalitions: Cultural Diversity in Cognition and Teamwork* (LTAMC)[2]. LTAMC's general focus is on cooperation and adaptability in multinational coalitions, where the author of this report contributes with a focus on cross-cultural organizational issues linked to cooperation in international NATO headquarters.

The LTAMC team collected data for the first time at the Deployable Joint Task Force (DJTF) HQ during NATO exercise Allied Warrior 2004 (AW04)[3] in October/November. Data was collected on culture, cognitive readiness, personality, and organizational variables via questionnaires, observation, and semi-structured interviews.

This report presents the analysis of the data on cross-cultural organizational issues from the AW04 exercise[4], aiming is to contribute both to the LTAMC and the NBD-O projects. This is considered a pilot study, as it was the first time a new organization-focused questionnaire was employed[5]. As such, this report also describes actions taken to revise the organization-focused questionnaire based on the data collected.

The aim is to increase the understanding of the interconnections between organizational and group processes, decision-making, information-sharing, language and culture. The intention is

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[1] The Norwegian term for Network Enabled Capabilities (NEC).

[2] LTAMC was established in 2004 under NATO Strategic Allied Command Transformation (HQ SACT, Concept Development and Experimentation (CD&E) and is led by the U.S. Army Research Laboratory (ARL). The project is also registered as a NATO Research and Technology Organization (RTO) Human Factors and Medicine (HFM) Panel exploratory team on a project titled *Adaptability in Coalition Teamwork* (ACT). The currently participating nations are Canada, Norway, Sweden and the United States (Greece and the United Kingdom participate as observers).

[3] AW04 was the first time experimentation was sanctioned by Strategic Allied Command Europe (SACEUR) to be integrated as part of a major NATO Command Post Exercise (CPX).

[4] The current "part 1" of this report focuses on the organizational issues covered by the questionnaire. Due to a temporary inability to access the culture-data collected in the AW04 exercise, the interaction with culture and nationality will be analyzed in a part II of this report (which will be published shortly).

[5] Developed within the NBD-O project at FFI.

ultimately to provide important feedback, evaluation and input to the organizational development and training in the Norwegian Armed Forces in particular and in NATO and PfP[6] nations in general. This is linked to the NATO goal of transforming its forces toward NEC (NATO HQ SACT, 2004).

1.1 The AW04 exercise

The exercise was designed to certify readiness of the NATO Response Force 4 (NRF 4)[7] from January through June 2005. The HQs for NRF 4 demonstrated this capability during the planning and conduct of a simulated Crisis Response Operations (CRO) down to the Combined Joint Force Land Component Command (CJFLCC) HQ level. Activities at the joint level included pre-mission training, practicing crisis response planning procedures, mounting the NRF CJFLCC HQ for deployment and establishing the DJTF and NRF CJFLCC HQs and C2 structure in a theatre of operations beyond NATO's Area of Responsibility.

1.2 The DJTF - the case

The AW04 was a command post exercise (CPX)[8] and in reality a rerun and a control of the readiness of the NRF 4, as they were officially approved on their former exercise in 2004. The personnel at the DJTF from HQ Naples were the focus of our study.

We were informed that the DJTF had been reorganized after the principle of Effects Based Operations (EBO)[9]. This was understood by one of our key informants as: a system organized around the goals set by the commander, a change from the formerly used J-structure into to a "cellular EBO structure", and a change from separate services into a joint structure. These organizational changes had been introduced in a preceding exercise in 2004, so this was the second time the personnel exercised this new organizational structure.

This study aims to go more in depth into what this reorganization meant for the personnel, in terms of their individual perceptions of organizational and group processes, decision-making, and information-sharing. The study furthermore looks into how these variables interacted with language skills and culture. Due to a temporary inability to access the culture-data collected in

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[6] Partnership for Peace.

[7] In accordance with the overall NRF Military Concept (MC 477 The NATO Response Force Military Concept, 10 April 2003), joint NRF Command and Control (C2), embedded in Strategic Command HQ, Joint Force Command (JFC) HQ, and Command Control HQs, must provide a high degree of interoperability and the capability to rapidly plan and prepare for deployment during an emerging crisis, as well as the capability to operate as a stand-alone initial entry force for up to 30 days. Thus, the NRF has a short-term perspective; they will have to be able to evacuate people, do immediate disaster relief, etc.

[8] I.e. run by an exercise command.

[9] The "NATO networked enabled capability (NNEC) foundation document" (NATO HQ SACT, 2004) states that NRF is the "catalyst for change" and that Effects based operations (EBO) is the tool in order to get there (i.e. NEC) and the goal to strive for, i.e., the "approach to operations at all levels of command" (p5, NATO HQ SACT, 2004). The document further states that EBO will require the achievement of "3 transformational goals: Decision superiority, Coherent Effects, and Joint Deployment and Sustainment".

the AW04 exercise, the interaction with culture and nationality will be analyzed in a part II of this report (which will be published shortly).

1.3 Purpose

The purpose of this study was twofold; to provide some initial answers to our research questions related to organizational processes and cooperation in military multicultural settings and to develop an organization-focused questionnaire for such use. Thus, the study was exploratory in kind.

The main groups of variables that we looked at were: information-sharing, decision-making, language proficiency level, organization, group roles and processes, identity, and culture. The goal was to find out how these interact and which patterns they may produce in military multicultural organizations.

In addition to the more exploratory nature of this study, we had some hypotheses about how these variables could be interrelated.

2 METHOD

This report presents the analysis of the data from the AW04 exercise focusing on cross-cultural organizational issues, using both qualitative and quantitative measures and methods of analysis. More specifically, a combination of observation, semi-structured interviews and questionnaires were employed for the data collection. This is considered the pilot work in the development of an organization-focused questionnaire.

The questionnaire endeavors to measure organization and organization-related variables anticipated to be of importance for the cooperation and decision-making in multicultural military settings like a NATO headquarter.

The work reported here is a more qualitative supplement to the other scales employed in the LTAMC project; it aims to expand the overall understanding of the interplay between the cognitive, personality and cultural factors (measured with standardized scales) with the actual organizational setting in a military headquarter.

2.1 Sample and execution of study

The data-collection was carried out in the course of 6 days, November 2004. The military personnel at the DJTF from HQ Naples were the focus of our study. They counted approximately 90 persons and were from 12 different nations; the majority of whom had their daily work at the NATO HQ in Naples.

We had two key informants, who gave us an overview of the exercise and the organization. 13 people from the DJTF was interviewed and 10 filled out the questionnaire. People who volunteered to participate were offered a choice between giving an interview or filling out a questionnaire. More or less the same questions were asked in the two conditions, as the questionnaire was used as the interview-guide. However, the interview allowed for additional follow-up questions and more unstructured feed-back.

Observation played a more secondary role in this study. It was primarily carried out in the Combined Joint Operations Centre (CJOC) of the DJTF during and in connection with a "walk-through" with one of our key informants and during a brief held by the Commander.

2.2 Lessons learned

We found there to be some differences between the use of interviews and questionnaires. As anticipated, the interviews gave more in-depth and holistic knowledge. The opportunity to clarify questions and make sure the respondent understood it in the way it was intended proved very helpful at this initial stage of questionnaire development. Also, this allowed us to ask follow-up questions to make sure we understood what the interview subjects actually meant.

The questionnaires, on the other hand, seemed to make it easier for the respondent to answer truthfully, especially on the more sensitive questions. In other words, the more anonymous situation seemed to relieve the respondent of the pressure to conform and of the motivation for "impression management".

There appeared to be differences in the participants' preference for method. For instance, some people implied that they would not have bothered to fill out a questionnaire but that they would like to do an interview, whereas others found it more tedious to do the interview. This could be due to a number of reasons; possibly differences at both the national and individual levels. It could also be that there are differences between national cultures, or that the English language proficiency level plays a role. At least, there seemed to be a preference for native English speakers (mainly US) to choose to do the interview, while non-native English speakers seemed to prefer the pen-and-paper questionnaire. Is it so that non-native English speakers often prefer to read and answer questions in writing?

This actually touches upon some of the research questions that will be dealt with in the following analysis. For instance, are there any such systematic differences in personal preferences between people from different cultures[10] or with different levels of language proficiencies? Could this explain some of the patterns in how people cooperate?

[10] As previously indicated, the analysis pertaining to the interaction with nationality and culture will primarily be presented in part II of this report.

3 ANALYSIS

3.1 Introductory overview and analysis of the case (the DJTF) and its organization

Our key informant reports that there had been a problem of people not interacting across their organizational boundaries in the traditional J-structure (i.e. “J-1 does not communicate with J-2.”). This is his understanding of why the organization was altered in this DJTF. By breaking up the old structure, the Commander intended to create more flexibility and better knowledge-sharing and cooperation across previous barriers. According to our informants at the DJTF, the organizational structure and processes had been molded from the ideas of the Commander.

Moreover, based on what we learned from our key informant, the Commander aimed to have the DJTF organized according to his understanding of how to reach the goals set by the EBO concept. The most evident example of this for the researchers was the joint structure of the CJOC (Combined Joint Operations Centre). The CJOC is the central point of contact in and out of the DJTF. This is where information about the unfolding situations at the tactical end comes in and is distributed within the DJTF. The information from the field forms the basis from which orders and intent are formed and distributed back to the tactical end to be acted upon. We were informed that the traditional J-structure had been broken up and that people were put together across services into different “cells” (e.g., command group, current operations, sustainment cell, planning cell, etc). According to our key informant, “each cell contains the appropriate personnel”. He felt they had the right people in the right place in the new structure and that it worked “really well”. Part of this perception was based on that most of the personnel had trained together and generally knew one another since 10 months back. This, we were informed, was quite unique. In other words, there had been put quite some effort into making this CJOC a team and not just an ad-hoc decision-making group. This was also pointed out by many of the interviewees as a great advantage.[11]

The interviewees furthermore said that training together was a necessity since the structure was new to everyone. As they were experienced higher officers, they had many years of experience working within the traditional structure. Many expressed that they found the changes in their roles and responsibilities in this DJTF to be bewildering. Indeed, most personnel said it was chaos on the first exercise, but that it was starting to work now. They reported that it was chaotic in the beginning of this exercise as well[12], as it took some time for them to remember how to work in this structure. It is important to underline that this was an organizational structure they had only been confronted with once before in this series of NRF 4 DJTF exercises.

[11] This perception supports research within “natural decision-making”, which has demonstrated that teams perform better than ad-hoc groups on decision-making (e.g., Orasanu & Salas, 1993).

[12] Indeed, one interviewee said that, “having this NRF ready in Spring 05, is like trying to pull a rabbit out of a hat”.

In general, it is not easy for people to change over night what they have used a lifetime to learn. It seams clear to the researchers that the real benefit of a new structure may first really be demonstrated with people that are trained to work in such a structure from an earlier point in their career.

3.2 Analysis of the questionnaire- and interview data and revision of the questionnaire

The analysis of the data collected with the questionnaires and interviews is organized in 7 chapters, each pertaining to the main topics covered. The topics are: Information-sharing, decision-making, language, organization, group roles and processes, social identity, and culture. The analysis is conducted topic by topic, with both quantitative and qualitative data analyses included.

Due to the explorative nature of this research and the low number in the sample, the analyses presented are primarily based on descriptive statistics. It was deemed that at this pilot stage in the research, the number of respondents was too low and the measurement tool too unfinished in order for more advanced statistical analyses to be of any value. Qualitative analyses are included alongside to give a more in depth and holistic understanding of the quantitative data.

In addition to the data analysis, there are descriptions of what has been done in terms of revising the questionnaire. This is presented in footnotes, as not to interrupt the flow in the presentation of the results and analyses.

3.2.1 INFORMATION-SHARING

3.2.1.1 Information push versus pull

There were two questions in the questionnaire measuring whether the respondents primarily pushed or pulled information; one from the point of view of information-distribution and one from the point of view of information-gathering. 100% of the respondents said they pushed information to a few or many colleagues; nobody said they waited for someone to request it. However, 39,1% said they got the information they needed by seeking it out themselves, and only 17,4% said they were provided with the information the needed from others (39,1% said they did both equally much). In other words, even though everyone claims to push information on when they have it, the majority claims to pull the information they need themselves. This discrepancy may be an indication of that even though people do push information, they can never be aware of, or able to, push it to everyone who actually will come to need it. Indeed, this finding may be an indication of a shortcoming in the traditional push-pull information-supply chain, and an argument for a change in the direction of a “post-and-pull” information-supply chain. A “post-and-pull” information-supply chain, describes a system where information is posted on the web (or a similar medium) and made accessible to those who may need it (for more on this topic, see e.g., Albert & Hayes, 2003)[13].

Qualitative data also supports this interpretation. Some interviewees explained that they at times did not know who would need the information, and that this would be an obstacle for the information-sharing process to actually work the way it was intended.

However, the questions still had a correlation of 0.45 ($p<0.05$), which means that people who indicate that they mostly push information to *many* persons, also tend to indicate that the information is pushed to them. People indicating that they only push information to *a few* persons, also indicate that they mostly pull information themselves. This shows that despite the discrepancies described above, there is a systematic relationship between how people answer these questions, indicating that they both may be valid questions to measure how information is shared in terms of a push-pull frame of understanding. Qualitative data furthermore suggest that the choice between these strategies may depend on the role/position the person is given in the exercise. There were found no difference between native English speakers and non-native English speakers.

77,3 % of the respondents say that the type of information influence how they distribute it. However, there were found no relationship between this question and the one referred to above, pertaining to how the respondents distributed information. Thus, feeling that different information needs different distribution did not influence the degree to which they generally distributed information.

3.2.1.2 Information-flow/communication in the hierarchy

Three questions pertaining to information-sharing behaviors, related to how much the respondents comparatively did share, receive requests from, or seek out information from a superior, subordinate or equal. Descriptive statistics indicate that the respondents share information most often with an equal and the least often with a subordinate. They receive information requests most often from a superior and the least often from a subordinate. And they report to seek information most often from equals, and the least often from a superior. The differences are depicted in Figure 1.1. The only significant difference in mean score was found between information seeking from superior versus equal ($t = -3.51$, $p = .002$); i.e. they seek more information from equals.

[13] Networked information flow concepts, like posting and pulling information, enables organizations (such as supply units) that would not normally have the ability to task intelligence resources, to have the ability to search databases (e.g., previous reconnaissance imagery) to locate information no one ever thought to send them because no one ever anticipated their need for that information (for an exemplification of a post & pull information-supply chain, see Hafnor et al., 2005).

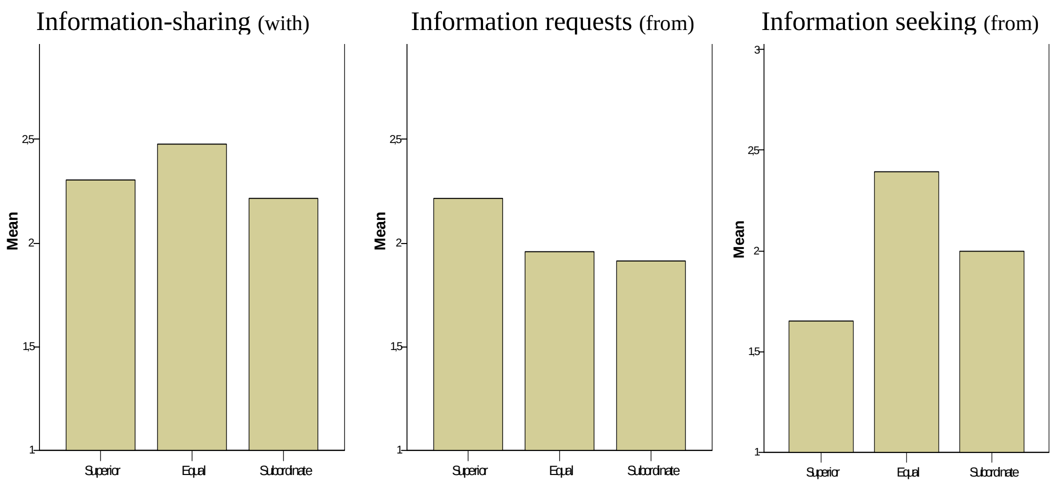

Figure 1.1. Differences in information- sharing, requests and seeking, between superior, equal and subordinate (1=min.score, 3=max.score).

The lack of significant results in who people share information with and receive requests from (depicted in the two first bar-charts in Figure 1.1), indicate that differences in these types of communication patterns were not great. Factor analysis demonstrates a pattern of reported sharing, receiving requests for, and seeking information, which indicate that the respondents may not have differentiated much between the types of communication they were rating. Rather, it could be that the answers to these questions to a large degree reflect the same variable; the general pattern of communication (see table 1.1 below).

Table 1.1. Factor analysis of questions pertaining to communication and information-flow. Principal Component Analysis with Varimax rotation. Factor loadings presented.

	1	2	3
1. Communication with subordinate			
Info-sharing with subordinate	.936		
Info-seeking from subordinate	.871		
Info-requests from subordinate	.763	.214	-.102
2. Communication with equal			
Info-seeking from equal		.889	
Info-sharing with equal		.880	
Info-requests from equal	.263	.774	.167
3. Communication with superior			
Info-requests from superior		-.390	.791
Info-seeking from superior		.281	.738
Info-sharing with superior	-.496	.234	.679

Qualitative
Qualitative questions on what the interviewees thought was the general policy of information-distribution in the organization under the exercise, added to the understanding of why the quantitative results presented above seemed somewhat mixed. There were some who reported that information was shared in a traditional form, i.e. upwards in the hierarchy. Informants said for instance that, information went “mainly upwards (component-console-commander)”, and that “only some general information goes downwards”, and that “the purpose here and elsewhere is to provide the Chief with information so that he can make decisions”. This explains why the descriptive statistics show that information is most rarely shared with subordinates, most rarely requested from superiors, but most often requested *by* superiors.

At the same time, there were people who said that information was shared radically different from the norm in this organization. For instance, one interviewee said that it was “very different from usual here – all information is shared on all levels, with few exceptions”. Another one said that: “Because the organization of the CJOC is relatively flat and consists of a great number of subject matter experts, it makes horizontal information-sharing very important”. This would explain why descriptive statistics indicate that the respondents most of the time both share information with, and seek information from, equals.

Finally, some explained it like this: “one does not always follow procedure, as there are always unpredicted situations and things that do not work” and that there was “no real policy - just do it”. This adds to the understanding of why there does not seem to be a very systematic way of how people perceive the sharing, receiving and seeking of information.

3.2.1.3 Information sufficiency

There were two questions measuring how content the respondents were with the information they received. One question asked about the amount of information they received, and the other about the quality of the information. 54,5% said that they got the right *amount* of information in order to make decisions. Only 9,1% said that they received more than they needed. 31,8% reported to be somewhat content with the *quality* of the information that they received, while 22,7% reported that they were somewhat discontent. The remaining 45,5% were neutral.

The two questions had a significant correlation of .588 (p=.004), demonstrating that the questions are related and can be deemed to measure the same underlying variable; information sufficiency, in order to provide adequate situation awareness and consequently be able to make well-founded decisions.

3.2.1.4 Obstacles to information-sharing

Time constraints were rated as the most important obstacle for a person to share information, while culture was rated as the least important obstacle. The distribution of answers on the various categories of obstacles for information-sharing is shown in the figure below (1.2). A high mean score is representing an important obstacle.

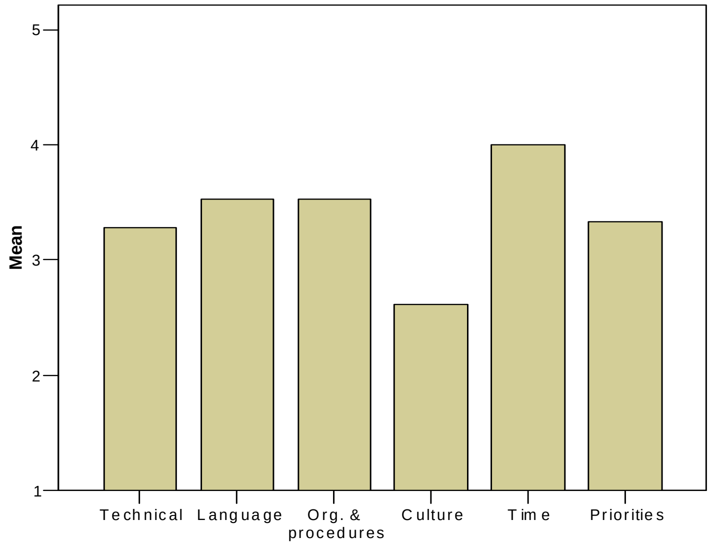

Figure 1.2. Obstacles to information-sharing (min.score=1, max.score=5).

There also turned out to be some differences between native and non-native English speakers on how important they rated the various obstacles to be. Especially pertaining to language and culture; there were some quite large differences between the two groups. Contrary to expectations, native English-speakers perceive language and culture to be a greater problem for their information-sharing than non-native English-speakers. This is shown in the figure below (Figure 1.3).

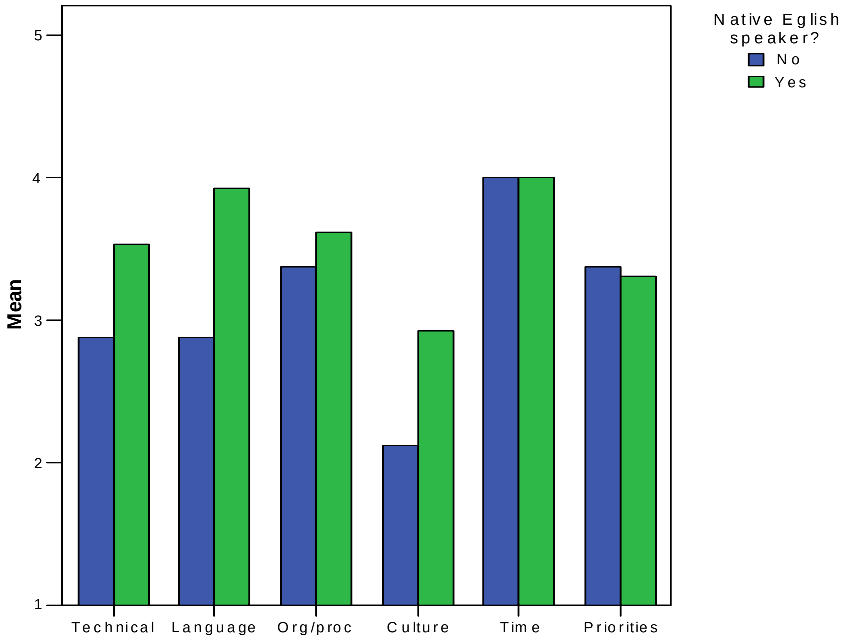

Figure 1.3. Obstacles to information-sharing: native English-speakers and non-natives (min.score=1, max.score=5).

Language is the one obstacle for information-sharing where people differ significantly depending on whether they are native English-speakers or not (t=-2.08, p=.05). The differences in the ratings of culture did not prove to be significant. However, since the sample was small (n=23) and since it was not far from being a significant finding, it is included in the table below (table 1.2).

Table 1.2. T-test for difference in mean score for native versus non-native English speakers. Mean scores, with standard deviation in parentheses.

Greatest obstacle for info-sharing:	*Native English speaker?*			
	Yes (N=9)	*No (N = 13)*	*t*	*p*
Language	2,67 (1,32)	3,92 (1,44)	-2,08	.05
Culture	2,00 (1,50)	2,92 (1,44)	-1,45	.16

Qualitative

A qualitative follow-up question revealed that the respondents also felt that there were other obstacles to their information-sharing than the items presented in the closed-ended questions of the questionnaire. These were: “differences in organizational culture”, “approachability of Commander”, and “lacking knowledge about who needs the information”[14].

[14] The qualitative data contributed to the process of revising the questionnaire for further use. The items referred to here have been included in the now updated version of the questionnaire as closed ended questions. (As anticipated in the beginning of the analysis, chapter 3.2, the methodological development, i.e. what has been done to update the questionnaire, will continue to be presented alongside the analysis, like this - in footnotes.)

3.2.2 DECISION-MAKING

3.2.2.1 Who makes decisions - and how?

73,9% of the respondents reported that their superior made most of the decisions in their environment, while the remaining 26,1% reported that they made the decisions themselves. None said that a subordinate made most decisions. The responses are as expected from a traditional hierarchic organization.

34,8% report that decisions are made by one person (leader), while 47,8% report that decisions are made by one person (leader) in cooperation with a team. The remaining 17,4% report that most decisions are made by a team[15].

Qualitative

Qualitative data support the finding of traditional hierarchic processes and a largely centralized decision-making process in the organization (see also chapter 3.2.4.1 for more on this). More specifically, meeting observation revealed an organizational culture and process in that particular setting that can be characterized as demonstrating great respect for the leader, expectations of him having all the answers, leaving the asking of questions and decision-making up to the leader, and a lack of plenary discussions.[16]

3.2.2.2 Timeliness and speed of decisions

The majority of the respondents rated the timeliness and speed of decisions as good. 63,7% rated timeliness as either “very good”, or “good”, while 59,1% rated speed of decision-making as “just right”[17].

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[15] In the questionnaire, only people who chose the first answer-category (“one person”) were intended to go on to answer the next question on whether or not this person tended to rely on the work and advice of others. However, many respondents had not understood this (based on feed-back from interviewees as well as the finding that more people answered this question than whom had chosen the first category answer). This was therefore clarified when revising the questionnaire.

[16] There are some possibly less favorable effects of such processes. When people are not included in a more free discussion, many may have things to add and things to ask, which may be lost. The abstention from asking clarifying questions may furthermore underlie subsequent lack of initiative and misunderstandings on the personnel’s part. This is typically a circumstance that also may facilitate for the “group-think” phenomenon (a phenomenon where faulty decisions are more easily made because dissident voices are not heard [Janis, 1971]). However, it should be clear that these particular interpretations are preliminary and limited to this one setting.

[17] The questions on the timeliness and speed of decisions are not directly correlated, due to different coding of values. However, the qualitative interpretation of their meaning, crosstabulation, and a chi-square analysis (indicating a probable curvilinear relationship) indicate that there is a relationship. The descriptive analyses described above also shows an overlap between the questions, which lead to the decision of cutting the first question, pertaining to the “timeliness of decisions”, in the now revised form of the questionnaire.

3.2.2.3 Quality and success of decisions

The distribution of the answers to the question pertaining to perceived decision quality is presented in the subsequent table (table 2.1). It shows that 68.1% rate decision quality as good or very good, while only 4,5% rate decision quality as poor.[18]

Table 2.1. Decision quality (frequencies).

	Frequency	Percent
Very good	3	13,6
Good	12	54,5
OK	6	27,3
Poor	1	4,5
Total	22	100,0

One respondent did not answer this question

54,5% rate decisions as successful in some degree, while 9,1% rate decisions as somewhat unsuccessful. The distribution of answers to this question is shown in table 2.2.

Table 2.2. Decision success (frequencies).

	Frequency	Percent
NA / difficult to say	1	4,5
Very successful	3	13,6
Partly successful	9	40,9
OK	7	31,8
Somewhat unsuccessful	2	9,1
Total	22	100,0

One respondent did not answer this question

As expected, there seems to be a close interrelatedness between the quality and success of decisions. Indeed, the questions had a significant correlation of .491 (p=.027).

[18] There was found a possible discrepancy in the understanding of two questions: only one respondent says decision quality is poor, however, 7 respondents say decision quality is a problem. This should have been approx the same if the questions were measuring about the same thing - as intended. It seems that many respondents may rate decision quality as both “ok” and even as “good”, while still rating decision-quality as a problem. There is no clue as to why from the qualitative data. However, it seems plausible that the wording of the two questions may have been somewhat confusing and that the first one was understood to pertain to their own environment, while the latter was understood more in general terms. Additionally, there was a negative wording in the second question, which may have given a negative priming effect. Therefore, the second question, on whether decision quality was a problem, was cut in the revision of the questionnaire.

However, people tend to rate the quality of decisions higher than success of decisions. So even though people may rate decisions as good in terms of quality, they may find them to be unsuccessful.

Qualitative

Qualitative data help increase the understanding of the quantitative findings on the ratings on decision quality and success presented above.

When rating decision quality, people tend to base this on their understanding of the decision-making processes. People who rate decision quality highly tend to explain it with what they understand to be a good decision-making process, while those giving low ratings on decision quality tend to see the decision-making process as flawed. On the positive side, explanations could look like this: “Most decisions here are done very well, based on appropriate team-work in a correct and timely manner.”, or like this: ”There is strong leadership and guidance, better communication than usual, and a very accessible general”. On the negative side, people said things like: “Decision quality is often ridiculous – a lot of impulsiveness on the leadership, it seems to me.”, and: “Input to decisions are not as complete as they could be. Input to decisions is shaped by what the boss will want. Intermediate leaders are not guiding the process.”

People’s ratings on decision success appear to be more based on feedback on outcome – both for those rating the decision success positively and negatively. One subject explained that it was “based on feedback from external sources and subordinates”.
Thus, the reason for the ratings of decision quality and success seems to be somewhat different, which explains how people sometimes rate decision success to be lower than decision quality. In short, the quality rating seems to be more based on the decision-making process, while the success rating seems to be more of a rating on the feedback on the outcome. According to this, the reason for the success to be rated somewhat lower than the quality, is simply that the feedback on outcome is generally less favorable than the perceived quality of the decision-making processes.[19]

3.2.3 LANGUAGE

3.2.3.1 English language proficiency level

9 out of 23 in the sample were non-native English speakers. These answered questions on comfort, stress and tiredness to evaluate their level of English proficiency. As table 3.1 below shows, these questions were quite highly correlated. Due to a low variance in distribution on the question on comfort, Spearman’s rank-order correlation analysis was applied.

[19] There is more variance in the answers on the question on decision success than on the question on quality. Cutting the question on quality to the advantage of the question on success was evaluated. However, the difference in answers were found to add value to the understanding; as indicated in the text, even though people may rate decisions as good in terms of quality, they may still find them unsuccessful. And ratings of both the decision-making process and the outcome of decisions are deemed to be valuable for the continuation of this research.

Table 3.1.English language comfort level: Relationship between comfort, stress and tiredness. Spearman's rho. N = 9

	Feeling stressed	Feeling tired
Feeling comfortable	.674*	.846**

* p <.05 ** p < .01

However, the frequency distribution shows that there is very little variance in the answers to the question pertaining to how comfortable people were using the English language in their work. Moreover, 40% said they were very comfortable and 60% said they were quite comfortable with using English. However, 44,4% said they either sometimes or often became more stressed when working in English, and 75% said they either sometimes or often became more tired when working in English. This may indicate that the question about comfort only confirms what we suspected; that when asked directly, people tend to rate themselves higher on English proficiency than what their real proficiency level is at. This is understood to be caused by the high social desirability of speaking good English. Therefore, English proficiency level seems to be more accurately captured by the more indirect questions on feelings of stress and tiredness[20].

The respondents' answers to the question about tiredness come closest to how people see it from the outside. Respondents claim that their colleagues either sometimes (83,3%) or often (16,7%) have problems understanding or making themselves understood in English. This corroborates the indication made above, that there is a tendency to underreport one's own language deficiencies due to the social desirability of speaking good English.

3.2.3.2 Language and the choice of medias of communication

Two questions measured whom the respondents communicated most with in writing (by computer) and orally. Crosstabulation shows that answers to the two questions are almost exactly the same (table 3.2 below)[21]. This indicates a lack of difference in which means of communication people choose when communicating with native English speakers or non-natives.

[20] Due the problem of social desirability affecting the answers to the question of comfort and the low variance in answers, and the fact that it seems better covered by the questions on stress and tiredness, the question on comfort was cut when revising the questionnaire.

[21] Due to this overlap, these two questions are condensed down to one question about communication in the revised form of the questionnaire.

Table 3.2. Crosstabulation: Whom the respondents communicate most with in writing/by computer, and whom they communicate most with orally.

		Communicate most with orally			
		Native English speakers	*Non-native English speakers*	*Speakers of my mother tongue*	Total
Communicate most with in writing/computer:	*Native English speakers*	9	1	0	10
	Non-native English speakers	0	9	1	10
	No difference	1	0	0	1
Total		10	10	1	21

However, a question on personal preference for the use of oral versus written medias of communication seem to indicate a slight preference towards written medias of communication for non-English speakers.[22] This is shown in the crosstabulation below (table 3.3).

Table 3.3. Personal preference for the use of oral versus written medias of communication and whether the person is a native English speaker or not.

		Comm. preference			
		Oral	*No preference*	*Written*	Total
Native English speaker?	*No*	3	4	2	9
	Yes	9	5	0	14
Total		12	9	2	23

The question is how English proficiency level affects non-English speakers; is there a further difference depending on how well they speak English? Crosstabulation below shows the relationship between communication preference and language proficiency (sumscore[23]) (table 3.4).

[22] On the basis of qualitative answers, the question about a preference for oral or written medias of communication was rewritten and expanded to include more details about when they may prefer one in favor of the other.

[23] The English language proficiency sumscore was calculated from the three questions aiming to measure this; the questions on comfort, stress and tiredness (presented in the preceding chapter).

Table 3.4. The relationship between communication preference and language proficiency (sumscore).

		Comm. preference			
		Oral	No preference	Written	Total
Language proficiency score*:	*2*	0	0	1	1
	4	0	1	0	1
	5	0	2	0	2
	7	1	1	0	2
	8	1	0	1	2
Total		2	4	2	8

*A high score reflects a high degree of perceived language proficiency.

There are evidently too few respondents to conclude anything about a relationship here at this stage. However, there seems to be a slight tendency for non-native English speakers who have a lower English language proficiency level, to prefer written medias of communication. The qualitative data presented below adds to the understanding.

Qualitative

Indications from the interviewees reveal that the choice of oral or written medias of communication may depend on several circumstances, such as language (of both the receiver and the sender: native/non-native English speaker)[24], hierarchy (message to superior or subordinate), time (shortage), and familiarity (how comfortable you are with the person). Except when the choice is due to time shortage, people's preference for oral communication is generally based on face-to-face interaction.

People claim to choose oral communication first of all because they can get immediate feedback on the other party's understanding and can, if necessary, clarify the message. This is especially understood to be an advantage when communicating with non-native English speakers. However, several interviewees experienced that the telephone was the least well functioning medium when communicating with non-native English speakers. Furthermore, the choice of oral means of communication was deemed to depend on whether or not they felt comfortable with the person they were communicating with.

Written medias of communication were often chosen by the interviewees if the message was of high importance, so that the receiver could keep it for reference. The possibility of keeping the message for reference was deemed to be of even greater importance when communicating with non-native English speakers. The written communication allows the non-natives more time and the option to consult co-workers if they should need a clarification of meaning. This would explain the slight tendency found in the quantitative data for non-native English speakers who have a lower English language proficiency level, to choose written medias of communication.

[24] For the development of the questionnaire, these qualitative findings lead to the specification and expansion of the question pertaining to personal preference for oral or written communication. More specifically, in the revised form of the questionnaire specifications were included, on whether the question pertained to receiving or sending information, and whether the other was a native or a non-native English speaker.

Communicating in writing would in this way help prevent people, especially non-native English speakers, from too quickly claiming to have understood something that they in reality may not have understood. Written means of communication were also chosen when they needed to give the same message to many people. Furthermore, written means of communication were preferred if they felt uncomfortable with the other person. Finally, some said that they chose written means of communication when communicating with subordinates, while oral when communicating with their superior.

Making sure that the receiver had understood the message, seemed to be the most obvious concern for the people I spoke with. This was the reason given by both people who preferred written and oral communication. However, on a personal level, some individuals appeared to be more comfortable in a face-to-face situation, while others preferred the computer.

3.2.3.3 Language and communication patterns

Analysis of native English speakers and non-native English speakers was carried out in order to examine whether there were any differences between the two groups in whom they communicated most with (native English speakers or non-native English speakers). Crosstabulation showed no indication of any difference.

Further analysis of non-native English speakers was carried out in order to examine whether there were any differences in language proficiency between those who communicated most with native English speakers and those who communicated most with non-native English speakers. A t-test showed no difference in mean language proficiency score between the two groups.

Thus, neither language proficiency nor whether the person is a native English speaker or not seem to affect whom the personnel choose to communicate with. Qualitative data also supports this understanding. Interviewees generally pointed to organizational procedures and the composition of people in the organization as the reason for whether they communicated most with native English speakers or non-native English speakers.

3.2.3.4 Language and power relations

It was expected that language proficiency might influence power relations. There were four questions aiming to measure language-related power relations. These focused on: persuasion, understanding of another person’s point of view, domination in cooperative situations, and the act of interrupting. 66,6% of non-native English speakers said that they sometimes or often found it harder to persuade their colleagues of their ideas in English than in their native language. But a lot fewer, 22,2% of non-native English speakers, said that they sometimes or often were interrupted more when communicating in English than in their native language. 81,8% of the respondents found it harder (sometimes, often or very often) to understand non-native English speakers point of view than native English speakers. 95,5 % of the respondents found native English speakers to dominate (sometimes, often or very often) cooperative situations more than others.

From this, we understand that a great majority of the respondents found it harder to understand non-native English speakers point of view than native English speakers, as well as finding native English speakers to dominate in cooperative situations in this organization. This seems like a logic connection. Indeed, these two variables were significantly correlated (.543, p=.009).

In other words, the great majority who perceive native English speakers to dominate, also tend to perceive non-native English speakers to have problems making themselves understood in English.

There were not found any significant differences between native English speakers and non-native English speakers on the variable pertaining to domination. However, there seems to be a tendency for native English speakers to rate the difficulties of understanding non-native English speakers' point of view as higher than what non-native English speakers seem to do. This is shown in the crosstabulation below (table 3.6). There was found a significant correlation of .428 (p=.047) between the two variables. This is in line with the findings reported in chapter 3.2.1.4; native English speakers were also found to rate language as a more important obstacle to information-sharing than did non-native English speakers.

Table 3.6 Relationship between being a native English speaker and finding that non-native English speakers often have problems making themselves understood.

		Finding non-native English speakers to have problems making themselves understood					
		Never	Seldom	Sometimes	Often	Very often	Total
Native English speaker?	No	1	3	3	1	1	9
	Yes	0	0	6	6	1	13
Total		1	3	9	7	2	22

3.2.4 ORGANIZATION

3.2.4.1 Organizational changes

In order to measure organizational changes made in the exercise-organization, there were questions pertaining to whether the personnel experienced the organization and processes as different compared to what they were used to. 87% of the respondents rate the organization that they are in during the exercise as different from what they are used to.

Three questions were asked in order to decide some of the details of the organizational changes introduced, pertaining to the respondents' perception of the hierarchy, centralization/decentralization, and flexibility of this organization compared to what they were used to. The subsequent two tables show the distribution of answers to the questions on hierarchy and on centralization/decentralization (table 4.1 and 4.2)[25].

Table 4.1. Level of hierarchy.

	Frequency	*Percent*
Much flatter	6	26,1
A bit flatter	5	21,7
No difference	7	30,4
A bit more hierarchic	5	21,7
Total	*23*	*100,0*

Table 4.2. Level of centralization/decentralization.

	Frequency	*Percent*
Much more decentralized	2	8,7
A bit more decentralized	7	30,4
No difference	6	26,1
A bit more centralized	6	26,1
Much more centralized	2	8,7
Total	*23*	*100,0*

The frequency table 4.1 shows that people nearly equally often think the organization here is more centralized, the same, or more decentralized than what they are used to. Table 4.2 indicate that there is about two times as many people who think this organization is flatter than what they are used to compared to those that think it is more hierarchic. The second largest group of respondents (30,4%) think this organization is about the same as they are used to.

The distribution of answers presented above indicates that the hierarchy may have been flattened in this organization, but also that this has not been accompanied by an equal amount of decentralization. Indeed, there was found no relationship between degree of hierarchy and decentralization (r= .062, p=.778). Crosstabulation could not demonstrate any relationship between the two variables either. One of the respondents who rated the organization as more centralized explained that; "This is contradictory to what they are preaching, even though it (the organization) usually also is centralized." Another one said it like this: "Intermediate leaders are not empowered to make decisions, so sometimes there is a chokepoint from the top for guidance." One respondent also saw it from the other side; he indicated that there was a

[25] Frequency-tables show a quite good spread in answers. Hence, questions are kept in their current form in the revised questionnaire.

problem of subordinates forwarding too many questions to their superior out of convenience[26]. The latter two comments indicate, from two different standpoints, negative consequences when centralization accompanies a flattening of the hierarchy (which is further elaborated on in the discussion, chapter 4.4).

4,3% found the organization to be a lot more flexible, 52,2% found the organization to be a bit more flexible, while 26% found it either to be a bit or much less flexible. There was found a quite large correlation between perceived decentralization and flexibility (r=.618, p=.002), indicating that people who found the organization to be flexible also tended to find the organization to be decentralized. This confirms the classic finding of a link between centralized organization and inflexibility (see e.g., Morgan, 1997; Roman, 1997; Bjørnstad, 2004).

Only one of the organizational variables included in the questionnaire, degree of centralization, was significantly correlated with the variable, "rating the organization as different from usual" (r=.548, p=.007). The variables, perceived difference in degree of hierarchy and flexibility, are only moderately and not significantly correlated with the perception of change (i.e., r=.312, p=.147, and r=.317, p=.317, respectively). However, being that there were only 22 respondents, significance can be difficult to obtain.

Stepwise regression analysis was furthermore conducted in order to check how well the variables (hierarchy, centralization, flexibility)[27] explained why people rated the organization as changed in this exercise. Degree of centralization turned out to explain 29,4% of the variance (adjusted R^2=26,1%, p=.007). See table 4.3 below.

Table 4.3. Regression analysis: Ability of the variable, degree of centralization, to explain why people rated the organization as changed in this exercise.

	b	*SE b*	*Beta*	*t*	*p*
Constant	.442	.428	-	1.033	.313
Degree of centralization	.580	.196	.543	2.959	.007

Adding the other variables (hierarchy and flexibility) to the model did not increase its explanatory value. Indeed, it turned out to explain less of the variance (Adjusted R^2=22,6%, p=.050).

Qualitative

Qualitative data gives some insight into how and why the respondents, in their own words, perceive the organization as different. In general, they explain why they rated the organization as different by pointing to changes in organizational structure. One said that, "HQ is a stovepipe organization, this is not at all. It is quicker and there is a cross-flow of ideas.".

[26] He found this problem to be accentuated by the use of computers, since, as he said, "they (computers) are impersonal and makes it too easy to ignore a message".

[27] The independent variables were recoded for this analysis, so that high scores represented change in any direction (in line with the scoring of the dependent variable).

Another one said it like this: “It has changed from J-structure to effects structure (EBO). It combines different expertise differently”. Another view of the change is represented by the following statement: “There is not as many people required (in this organization), but there is not always true experts in the positions.”

The qualitative data presented indicate that people may not primarily think of variations in hierarchy, centralization and flexibility when they rate organizational changes. However, the “stovepipe” organization that many interviewees were pointing to is a type of organization that is based on the principles of hierarchy, indicating that even though people may not extract the variables as we do in research, they may include them as part of a more complex understanding of organizational changes. Additionally, the last statement pointed to above, also reflect changes in roles and responsibilities, which is further covered in the next chapter (3.2.5).

3.2.4.2 Perceived success of organizational changes

This variable indicates to what degree the organizational changes in this exercise are perceived to be a success by the personnel[28]. 54,6% of the respondents perceive the new organization as better in some degree, while 31,8% perceive it as poorer.

Taking into consideration the confusion that any organizational change induces, one may claim the changes to have been a success as there is a majority who have rated the changes to be for the better. At the same time, this is only a moderate majority, indicating that there is room for improvement.

There was found no relationship between organizational changes per se or the type of organizational changes, and the rating of the organizational changes. In other words, there were no statistical differences in how people rated the organization depending on perceived organizational changes or type of organizational changes.

Qualitative

Qualitative data provides some further insight into why people rated the organization as they did. The reasons given for rating the organization as “better now”, includes finding decision-making and information flow faster, team processes better, organization flatter, and goal-achievement more in focus than what they were used to from their daily work. Here are some examples of statements that were made:

“The team work is more complicated, but much more effective.”

“Decisions can be made faster because of the relatively flat organization.”

[28] Comparing the distribution of answers to the question on organizational change with this question on whether the change was to the better or worse shows that people who report no organizational change also report “no difference” on the question of success (13% on both questions). This should indicate that the questions have been understood in the way it was intended.

"Information-flow is quicker."
"There is more focus on achieving the goal."

On the negative side, people rated the organization as "poorer now", because they found the organization to be bureaucratic, that there was micromanagement, that there had been too little time for preparation, that there was a lack of manning, and that the information did not always reach everyone. Following is a couple of examples:
"It is not very well organized; information does not always reach everyone".
"It is hard to work with NATO bureaucracy."

3.2.4.3 The interrelatedness of organization (hierarchy, centralization, flexibility) with decision-making and information-sharing (communication, obstacles)

In order to see whether organizational variables such as hierarchy, centralization and flexibility influenced decision-making and information-sharing, correlations and regression analyses were performed.

There was found no significant relationship between the organizational variables and decision-making, nor between the organizational variables and the rating of organization/procedures as obstacles for information-sharing.

Correlation analyses also showed no significant relationship between type of organization and communication pattern in terms of information-sharing/requesting/seeking. Nevertheless, regression analysis was performed for the only two variables that showed an almost significant relationship in the correlation matrix, centralization and receiving information requests from superior[29]. These were in fact negatively correlated (r=-.409, p=.053), which means that the more centralized the respondents found the organization the less requests they experienced to receive from their superior. This could indicate that the respondents tended to experience the organization as more decentralized when their superior made more contact in terms of information requests (the only measure of the respondents perception of the superiors initiative to communication with him/her here). Degree of centralization explained 16,7% of the variance (adjusted R^2=12,8%) in receiving information requests from superior. See table 4.4 below.

Table 4.4. Regression analysis. Ability of the variable" information-requests from superior", to explain variation in perceived degree of centralization.

	b	*SE b*	*Beta*	*t*	*p*
Information-requests from superior	-,552	,269	-,409	-2,055	,053

When using the sumscores for the communication with subordinate, superior and equal, there was found no relationship with organizational variables.

[29] The non-significance of this result was deemed to be due to the low number of respondents.

3.2.5 GROUP ROLES AND PROCESSES

3.2.5.1 Tasks and responsibilities (group roles)

Four questions aimed to measure the respondents' role in the group/team and organization; whether their tasks and responsibilities were different in this organization compared to usual, whether this meant more, less or the same amount of responsibilities compared to usual, and how they liked it, both in terms of having experienced a change in tasks and responsibilities per se and in terms of an increase in responsibilities.

69,6% reported that their tasks and responsibilities were different from usual in some degree and 52,6% found the change to be for the better. 52,1% reported to have more responsibilities compared to usual and 55,4% rated that they liked the change in amount of responsibilities. The two questions measuring how the respondent rated the change per se (second question) and how the respondent liked the change in amount of responsibility (last question) were significantly correlated ($r=.543$, $p=.016$). This was not surprising, due to the questions' relatedness in meaning[30]. In addition, the two latter questions were significantly correlated ($r=.477$, $p=.025$), indicating that the respondents tended to like an increase in tasks and responsibilities.

Qualitative

Interviewees generally explained that their job in this exercise was different from usual because the peacetime organization, in which they had their daily job, was very different. Many people also worked in different areas here than what they usually did[31]. This change, however, some people found to be for the better, others found to be for the worse. It was explained to us that many people were not used to deploying, and that some of them actually never had deployed, which meant that they "were in for some frustrations", as one put it. This interviewee called it a "paradigm shift", and further said about this exercise that; "some were still very resistant (to change) while others were more accepting". The reason for such frustrations, is well explained in the following comment: "There is not always true experts in the positions; you get a role and need to fill it even if you have no expertise on it."

Some people found themselves to have less responsibility in this organization, which they tended not to like. One respondent explained that he had less responsibility here "due to centralized control". He also said that he was "normally a lot more independent and empowered in his role". This reflects back on the former chapter; the respondents tended to rate this organization as more centralized than what they were used to.

[30] Based on this obvious overlap in meaning, which was also pointed out to us in the interviews, the first question was cut in the process of revising the questionnaire.

[31] The following comment gives us an example of this: "In 'real life' I am in an IT-support role. In this organization I am involved in intelligence gathering and dissemination via known intelligence methodology."

Another comment on tasks and responsibilities says more about the division of responsibilities per se: “Many does not want to do more than what is within their domain, which is a big problem here since the structure is changed. So, some get too busy and others far too little busy.” This comment explains why some people report that they have too much to do while others report that they have too little to do. Furthermore, the statement points to the problem often found in bureaucratic type organizations (see e.g., Morgan, 1997), of people becoming, not only very good at doing what is within their area of responsibility, but also at not doing more than this. Thus, the organizational changes introduced here could represent an easing up of the strict division of responsibilities typical of bureaucratic organizations.

Relationship to organization

Analyses were performed in order to see whether the respondents’ view of the organization interacted with their views on their tasks and responsibilities. Rated difference in tasks and responsibilities was significantly correlated with rated organizational difference, centralization, and flexibility (see table 5.1 for details). This means that those who found their tasks and responsibilities to be different in this exercise/organization, also tended to find the organization different, more centralized, and more flexible.

Table 5.1 Correlations (N=23)

	Task and responsibility (different from usual)	Amount of responsibility
Organization (different from usual)	.436*	-.023
Centralization/decentralization	.430*	.087
Flexibility	.510*	-.017
Rating of organization	.098	.559**

* $p < .05$ ** $p < .01$.

A stepwise regression analysis was conducted in order to see how well these variables explained the ratings of change in tasks and responsibilities (table 5.2). Centralization was excluded from the model. Flexibility and organizational difference, together explained 46,9% of the variance (adjusted R^2=41,6%, p= .002). This indicates a close relationship between the respondents’ perception of the organizational changes (in terms of flexibility and general change) and their perception of changes in their own tasks and responsibilities.

Table 5.2. Multiple regression analysis. Dependent Variable: Task and responsibility (different from usual). N = 23.

	b	*SE b*	*Beta*	*t*	*p*
Constant	.044	.474		.093	.927
Flexibility	.374	.115	.528	3.239	.004
Organization (different from usual)	.528	.188	.458	2.807	.011

R^2=.47, Adjusted R^2=.42, F(2.20)=8.83, p<.01

Table 5.1 also shows that ratings of amount of responsibility and liking the organization were significantly correlated ($r=.559$, $p=.007$), indicating that those who are given more responsibilities in this exercise/organization also rate the organization as better. This corroborates the finding described in the beginning of this chapter; the personnel tended to report that they liked an increase in tasks and responsibilities. Further regression analysis revealed that the amount of responsibility explained 31,2% of the variance (adjusted $R^2=27,8\%$) in rated liking of the organization.

Relationship to communication and decision-making

The questions on tasks and responsibilities were checked for their relationship with both communication and decision-making variables, in order to see whether these could exert any influence on one another. There was found no covariance.

3.2.5.2 Cooperation (group processes)

Two questions aimed to measure how the respondents felt that changes in tasks and responsibilities (roles) affected group processes in terms of cooperation and liking. 45% reported that the changes had affected cooperation in some degree[32], and 46,2% of these reported that it was for the better. Thinking the change was for the better for how they cooperated with their colleagues, related significantly to reporting that they had more responsibility than usual ($r=.593$, $p=.033$), liked having more responsibility ($r=.691$, $p=.009$), and were integrated into central processes ($r=.610$, $p=.027$; see also next chapter, 3.2.5.3). This indicates that there is a link between having more responsibility, being more integrated into central processes, and better cooperation. It seems that having a more central role in the organization (more responsibility and more included in central processes), may influence the perception of group processes (in terms of cooperation) positively.

Qualitative

Cooperation was commented on like this by one interview subject: “As a team this DJTF functions better now than earlier. It gets better each time. By the second day this time it started to function. First deployment where this organization was started, it was chaos.” This points to the necessity for people to practice and train together, if the personnel are to function as a team and not just an ad-hoc group. This is in line with existing research on how teams outperform ad-hoc groups (e.g., Orasanu & Salas, 1993; Brown, 1988; Hackman, 1988).

Another respondent felt that cooperation with his colleagues had been affected negatively by the changes. He said: “In Naples, I know my job and can communicate from a position of authority. In the DJTF I am still learning and therefore cannot do that.” This indicates that people’s perceived proficiency in their role also affect their cooperative behavior with others.

[32] This finding is, however, somewhat unclear. It turned out that more people answered this question than those who had reported that there had been changes. This has been clarified in the revised form of the questionnaire.

Relationship to organization
Correlations with organizational variables were conducted in order to see whether they could have an effect on group processes (in terms of cooperation). It turned out that decentralization was significantly correlated with how the person liked the changes in cooperation (r=.698, p=.008). Indeed, a regression analysis revealed that centralization explained 48,7% of the variance (adjusted R^2= 44,1%) in how the person liked the changes in cooperation. Thus, it seems that more decentralization may bring on more contentment with cooperation.

3.2.5.3 Inclusion into organizational processes (group processes)

Three questions aimed to measure to what degree the respondents were included into the organizational and team processes. These were questions on how well they felt integrated into central processes, their activity level, and the amount of things they had to do in their position in this organization. 60,8% reported that they in some degree felt integrated into central processes in the headquarter, 65,2% reported that they in some degree were more busy than usual, and 86,3% reported that they had either too much or the right amount of things to do in their position. This should indicate that most respondents are quite well included into the organizational and team processes.

The question on activity level was significantly correlated with both the question on integration into central processes and with the question on the amount of things they had to do (r=.483, p=.020; r=.597, p=.003, respectively)[33]. The question on integration into central processes and the question on the amount of things they had to do were not significantly correlated.

Relationship to language and organization
Correlation analysis was conducted in order to check whether language and organization may have had any effect on whether the respondents were included into the organizational and team processes.

There was not found any relationship between language (native/non-native English speaker and English language proficiency level) and inclusion into organizational and team processes. Nor was there found any significant relationship between organization (hierarchy, centralization, flexibility) and whether the respondents were included into the organizational and team processes[34].

[33] Due to its meaning likely being satisfactorily covered by the two other questions, the question on activity level was cut in the revised version in order to shorten the questionnaire's length.
[34] Centralization and activity level had the closest thing to a significant relationship of these variables (r=.378, p=.076, R^2=.143).

Relationship to communication

Correlation analysis was conducted in order to check whether the communication pattern may be related to whether the respondents reported being included into organizational and team processes.

There were found several significant correlations. The question about information-seeking from superior (chapter 3.2.1) was related to all three questions aiming to measure to what degree the respondents were included into the organizational and team processes.
It was significantly correlated with integration into central processes (r=.517, p=.012), being busy (r=.614, p=.002) and amount of things to do in their position (r=.487, p=.024)[35]. This means that there is a tendency for people who report that they rarely seek information from their superior also to report that they are more integrated, busier and have more to do in their position. Having more to do in their position, was furthermore significantly related both to reporting more information-sharing with subordinates (r=-.584, p=.004), as well as to reporting more communication in general with subordinates (r=-.542, p=.009).

A sumscore of the three questions (integration into central processes, being busy and amount of things to do) was made in order to further find out to what degree being included into the organizational and team processes related to information-sharing with subordinates. It was moderately, but not significantly related (r=-.373, p=.088). This, together with the finding presented above, indicates a tendency for people who are more integrated also to integrate their own subordinates more (in terms of sharing information). This understanding is corroborated by the finding that having a lot to do is related to less information-seeking from superior. Since less information-seeking from superior is also related to being well integrated into central processes, it seems reasonable to interpret this to mean that the personnel who are well integrated centrally have less need for seeking information from a superior. Being that they are well integrated upwards may in turn indicate that they also simply have had more information to communicate to subordinates.

3.2.6 SOCIAL IDENTITY

3.2.6.1 Affinity

Three questions aimed to find out what formed the basis of the respondent's sense of belonging in the organization. One question related to whom in the hierarchy they worked the closest with, one asked where in the organization these worked, and one asked what gave them a sense of belonging. Frequencies show that most people work the closest with their equals and superiors (39,1% rated each of these as most important), and 72,7% say that these people are working in the same group as them in the organization. The question of what gives a sense of

[35] The questions on information sharing and those on inclusion into central processes had an opposite coding, meaning that a high score on the information sharing questions indicate a high degree of information-sharing while a high score on the questions on inclusion actually indicate a low degree of inclusion.

belonging, demonstrates that the team and assignment are rated the highest, while age and gender is rated the lowest, as presented in the figure below (3.1).

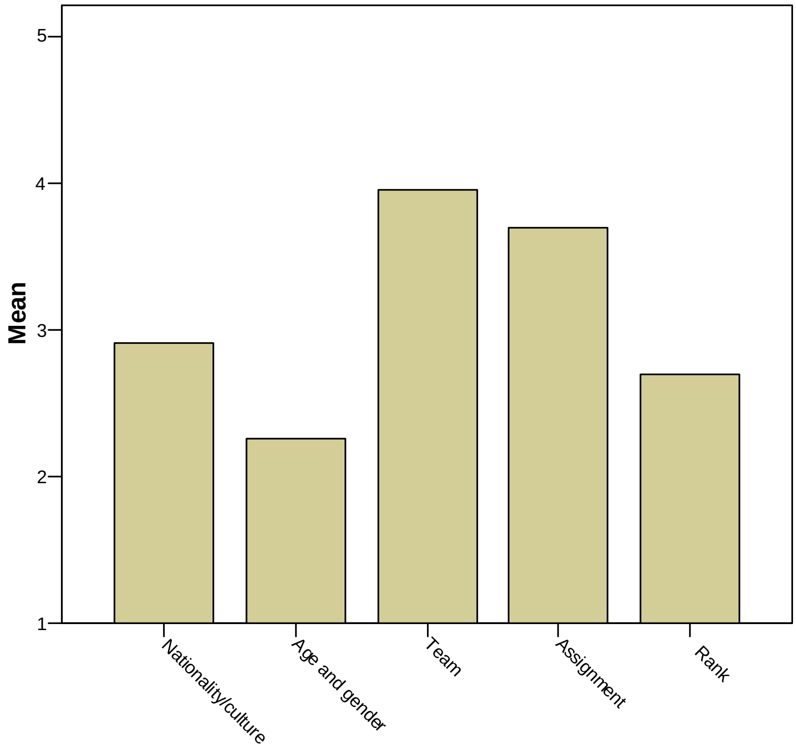

Figure 3.1. Ratings of what gives a sense of belonging (min.score=1, max.score=5).

Relationship to language

Further analysis was conducted in order to see if there were any differences between native and non-native English speakers in what created a sense of belonging. This is presented in the figure below (3.2).

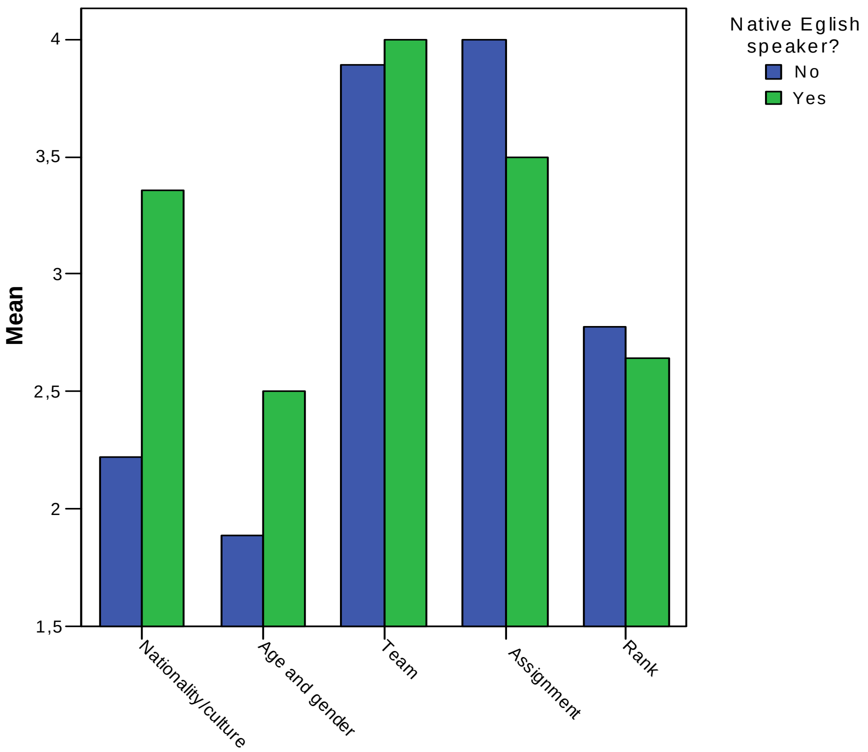

Figure 3.2. Differences between native English speakers and non-natives in ratings of what gives a sense of belonging.

A t-test demonstrated that there was a significant difference between native English speakers and non-natives in their ratings of nationality/culture (t=-2.446, p=.023). Native English speakers found nationality/culture to be quite a bit more important for their sense of belonging in this environment than did non-native English speakers.

3.2.6.2 Meaning of Affinity

Three questions aimed to measure the meaning of the personnel's affinities. These questions asked them to rate the importance of belonging, whether it is an aid in doing their job and whether it is an obstacle for them in doing their job[36]. Descriptive statistics show that affinity is deemed to be important in some degree by 87% of the respondents. 92,3% find it to be important for them in some degree to do their job while only 4.3% found it to be an obstacle. The two first questions were significantly correlated (r=.513, p=.012), indicating that people who find affinity important also tend to find it helpful in doing their job. The two latter questions were almost significantly correlated (r=-.411, p=.051), however, due to a lack in the spread of answers to the last question, a significant correlation would be difficult to obtain (see previous footnote).

[36] This question has been completely rephrased in the revision of the questionnaire due to a lack of variance in responses.

There was found a significant relationship between finding assignment to give a sense of belonging and finding affinity to be important (r=-.525, p=.01). Additionally, the relationship between finding assignment to give a sense of belonging and finding affinity to be an aid in doing their job was not far from being significant (r=-394, p=.063).[37] This indicates that a sense of belonging can help people working on the same assignment to get the job done. From another angle, this may also indicate that having a common goal (in terms of assignment) brings people closer (in terms of cooperation and group belonging/identity).

3.2.7 CULTURE

3.2.7.1 Cultural training

A computerized questionnaire and information program on national culture was introduced in the exercise by the LTAMC team. One of the aims was to find out whether this could have a positive effect on cross-cultural understanding and cooperation.[38]

There was 22.2% who rated the cultural training tool to have had some effect on their cultural understanding during the exercise. All of these turned out to be native English speakers. None of the non-native English speakers rated the tool to have been of any aid. Why there is such a difference is difficult to say, however, very few respondents answered this question, and consequently, these differences were not significant (see also preceding footnote).

Qualitative data suggests that non-native English speakers generally seem to be more aware of their own culture and more readily link their behavior and choices to culture. This could be due to them being minorities in this setting; feeling different from the majority may motivate to more reflection on cultural differences. However, it could also be that this is something they bring into the setting; people from smaller nations may be more used to contact with people from other nations, which may have contributed to them becoming more culturally aware. This would need further investigation, in order to be able to say anything with any reasonable certainty.

3.2.7.2 Tendency for controlling behavior

One question aimed to obtain a rating of the use of controlling behavior. Descriptive statistics show that there was an approximate equal number of people who reported that they either very often/often, sometimes, or seldom/never found a use for increasing downward control. There was no significant difference between native English Speakers and non-natives.

[37] There were found no differences between native English speakers and non-natives in the relationship between their ratings of what gives an affinity and the rated importance and aid of an affinity.
[38] The aim was to have personnel go through this cultural training before the start of the exercise. However, due to a delay in the arrival of the personnel, the bulk of this was done in parallel with the exercise. Consequently, the majority of respondents found it difficult to answer the question on whether the training tool had given a positive effect, hence, making the following results rather uncertain.

The aim was to see whether there were any cultural differences in how people answered this question. From the qualitative data we saw that people from low Power distance[39] cultures seemed to more often to rely on the ability of their subordinates to manage on their own, while people from high Pd cultures were more liable to indicate that the subordinates had to be guided in order for them to “get it right”. People from low Pd cultures tended to reveal more positive attitudes to their subordinates than did people from high Pd cultures. An example of a statement from the former would be: “The members of the organization are generally rather experienced, so I don’t feel a strong need to exercise an increased control.” An example of the latter, a more negative attitude, would be: “Some people tend to escape their tasks when they realize that the superior control is insufficient.”

This supports previous findings in cross-cultural organizational research (e.g., Bochner & Hesketh, 1994; Clegg, 1981; Hofstede, 1991; Offermann & Hellmann, 1997).

Culture/nationality and cooperation: Qualitative
On the question of which nationalities the respondents cooperate most with, the majority report that they cooperate most with people from the US and the UK. The general answer from our respondents was that this is due to the general make-up of the organization, indicating that these nationalities simply outnumber other nationalities in the organization.

However, some report that they also, to a certain degree, choose whom to cooperate with based on whom they feel most similar to and most at ease with, and that this sometimes had a root in similarities in culture. Several interviewees pointed to that similarities in language, ways of thinking/understanding, and values, guided their choice of interaction with other people.

3.2.7.3 Culture and trust

There were two questions pertaining to how the respondents generally related to people from different cultures and how they trusted them[40]. 36,4% reported that there were differences in how they related to people from different cultures, while 50% said that there were no differences. This could either mean that that there was a lack of cultural awareness in the 50%, or that they chose not to treat people differently in spite of their knowledge (which could be either in a positive or a negative sense). Qualitative data indicate that whether people choose to treat people the same, independent of culture, or differently, depending on culture, they do it because they believe it is the “right thing to do”. Some simply seem to believe that it is most correct to treat everyone the same (independent of culture), while others argue that there are advantages to “being sensitive to different cultures”.

[39] Power distance (Pd) is a cultural dimension which indicates to what degree there is an actual and experienced distance between people at the top and at the bottom of the hierarchy in different national cultures (Hofstede, 1991). Low Pd indicates small differences and equality, while high Pd indicates large differences and inequality
[40] Due to a lack of variance in responses and indications in the interviews of this being a sensitive question (people generally will not admit to distrusting other nationalities, as this may appear racist), it has been rephrased in the revised form of the questionnaire.

Very few (13,6%) said that they trusted people from other cultures less than people from their own culture (see previous footnote). Qualitatively, on this question, interviewees generally said that trust depended more on person than on nationality. However, some also specified that they more readily trusted someone from a culture or group that they knew normally performed well in the task at hand, and that others first had to prove themselves. One said it like this: “There is more of a need to get to know people from different cultures for you to trust them; to know what to expect, etc.” Some furthermore linked trust to understanding, “you trust those you understand”. In other words, it seems that trust has a lot to do with familiarity, in terms of ability to understand and knowing what to expect.

4 SUMMARY AND DISCUSSION

4.1 INFORMATION-SHARING

4.1.1 Push-pull and post-and-pull

Both the qualitative and the quantitative analysis of the information flow indicated that there might be a shortcoming in the established “push-pull” information-sharing system. This was found to support a switch to the model currently argued for in many NEC contexts, the “post-and-pull” model.

4.1.2 Information-sharing and hierarchy

Different information-sharing behaviors between superior, equal and subordinate were compared. It was found that that the respondents tend to both share information with, and seek information from, equals most of the time, while information requests are most often received from superiors. The latter is descriptive of a hierarchic organization, while the former indicates a flatter type organization. This is in line with the finding on organization (chap 3.2.4 and 4.4); most people find this organization to be flatter that what they are used to. These results indicate that attempts has been made to make the organization flatter and is hence in line with the EBO concept. However, the analysis from the chapter on organization also shows that the organization was found to be more centralized, which indicates that responsibilities have been shifted up, and not down in the hierarchy. (See also chapter 4.4.)

4.1.3 Obstacles for information-sharing: Time, language and culture

It was found that time constraints represented the most important obstacle for a person to share information. Native English-speakers and non-natives revealed the same opinion on this. However, there was found an important difference between native English-speakers and non-natives in how they rated language and culture; contrary to our expectations, native English-speakers perceived language and culture to be a greater problem for their information-sharing than did non-native English-speakers.

This finding is in line with the findings on language; native English speakers also perceived it as more difficult to understand non-native English speakers' point of view than did non-native English speakers. Thus, it seems that native English speakers find it more difficult both to understand non-native English speakers as well as to trust them to understand a message.

The notion that native English speakers may hesitate to share information because they are afraid that the non-native English speakers may not understand the message is supported by the qualitative data from the interviews. Native English speakers often report that they are unsure of non-native English speakers understanding.

There is still a question why language and culture are perceived to be more of a problem for native English speakers than non-native English speakers. It could be that native English speakers are less used to cooperating with people from other nationalities (both in terms of culture and language), and thus are more unfamiliar with the setting. It may also be that native English speakers rate the problem higher because they do not have insight into the language problem from the other end, and cannot as readily understand the problem or how to deal with it. This lack of ability to see the situation from the other's point of view may create a feeling of "us and them", where the other group (the "outgroup"[41]) is more easily perceived negatively. This is a classic finding from the research related to Social Identity Theory (e.g., Hogg & Abrams, 1988).

4.2 DECISION-MAKING

The analysis showed that a relatively stable majority (around 60%) of the respondents rated the decision-making as timely, speedy, of good quality, and successful. People tended to rate the decision-making process (quality) somewhat more favorable than its outcome (success).

4.3 LANGUAGE

4.3.1 Language proficiency

The results indicated that a large majority of the non-native English speaking personnel (75%) were negatively influenced by having to work in English instead of in their native language. Increased tiredness and stress were such factors. This means that non-native English speaking personnel are subject to a larger cognitive load relative to what natives experience, and that they consequently may be more vulnerable to additional stressors (see e.g., Fiske & Taylor,

[41] Term used in Social Identity Theory (e.g., Hogg & Abrams, 1988) denoting a group that the person in question does not belong to.

1991; Khan, 2002). The poorer the language proficiency, the higher the cognitive load. This will have an impact on their function in the organization, especially in times of high demands.

4.3.2 Language and means of communication

When it comes to the choice of means of communication, there seemed to be a very slight preference for written means of communication when the receiver and/or the sender was a non-native English speaker. However, quite a lot of respondents also preferred face-to-face interaction[42]. The telephone was the least preferred medium, perceived to augment the risk for misunderstandings.

4.3.3 Language and power relations

It was found that the great majority of our respondents perceived native English speakers to dominate cooperative situations more than others (95,5%), and that these tended to rate it more difficult to understand non-native English speakers point of view than native English speakers. These findings indicate that non-native English speakers clearly have a disadvantage in the organization and in cooperation compared to native English speakers.

4.4 ORGANIZATION

87% of the respondents rated this organization as different from what they were used to. It is very possible that this could influence the effectiveness of the organization. The optimal situation is that there is congruence between the organization one is used to and the organization one is to work in during an exercise or real operation. What has been practiced daily for years will evidently form a persons basic understanding of how the organization works and how he/she should do his/her work within it, in time becoming automatic and less subject for conscious evaluation. Especially in situations of high mental demand (stress), people increasingly depend on their most salient mental models, i.e. what they are most used to doing (e.g., Fiske & Taylor, 1991). Changing the organizational structure and processes is therefore a difficult and long process (see also Hofstede, 1991); people's basic understanding, or existing mental models, will continue to influence their behavior until new mental models become more salient. One cannot really expect a change in organizational structure and processes to become effective until this has become the norm for the people working in it. This point was also underlined in one of the interviews, where it was pointed out to us that the organizational changes meant that many people were put in positions where they did not possess the expertise they felt they needed in order to do the work.

On the other hand, one has to start somewhere in order to make changes, and one cannot expect the whole NATO organization and processes to change over night. Thus, the

[42] We do not have much data on this now (too few respondents), but there seems to be some indications (primarily from the qualitative data), that such preferences also may be somewhat culture-dependent.

organizational and procedural changes introduced in this DJTF, can be understood more like a step on the way than being final or complete in any way (i.e. the organizational changes resulted from the Commanders operationalizasation of the EBO concept). Hopefully, what studies like this may contribute to, is to increase the understanding of the effects of the changes and learn from the experiences of people who are in the middle of it.

A moderate majority rated the organizational changes to have been for the better. This was linked to an increase in speed of decision-making and information-flow, flatter organization and more effective team processes. Those who felt the changes had been for the worse, pointed to NATO bureaucracy, micromanagement, and a lack of time and manning.

The respondents tended to rate this organization as more centralized than what they were used to. This was reflected both in relation to the questions on organization and to the questions in relation to tasks and responsibilities. At the same time, the organization tended to be rated as flatter. This is in line with other empirical findings from the field; decentralization and flattening of the hierarchy are not always going hand in hand (e.g., Vego, 2003). Indeed, new technology and flattening the hierarchy often mean a centralization of decision-making rather than decentralization (see e.g., Bjørnstad, 2004). However, this is not optimal for the efficiency of organizational processes, as the top end of the hierarchy easily gets overloaded when too many decisions are routed upwards (see e.g., Dekker, 2003; Bjørnstad, 2004). This latter interpretation was further supported by qualitative data. In the interviews, it was explained that the decision-making process often was hindered due to an overload at the top end of the organization (“chokepoint”), because intermediate leaders were not sufficiently empowered to make decisions. Other interviewees saw it from the other side, indicating that subordinates forwarded too many questions to their superior out of convenience. Both viewpoints refer to organizational processes that make personnel lower down in the hierarchy less able to make decisions. This may be linked to the process of learned helplessness[43]; there is a risk that people become passive in systems where they get used to having insufficient authority to achieve set goals. If the person gets used to not being able to make a difference, it is a natural consequence to stop trying.

Decentralization and flexibility were found to be closely related; people who found the organization to be flexible also tended to find the organization decentralized. This confirms the classic finding of a link between centralized organization and inflexibility (see e.g., Morgan, 1997; Roman, 1997; Bjørnstad, 2004).

[43] This is a classic finding from psychology (Seligman, 1975); people (and animals) learn quickly to stay passive when they previously have learned that their actions are unsuccessful. This knowledge is furthermore transferable to different situations than where it was learned.

4.5 GROUP ROLES AND PROCESSES

4.5.1 Tasks and responsibilities

It was found that a majority (almost 70%) of the respondents perceived that their tasks and responsibilities to be different from usual in this exercise. This was found to be closely related to perceiving the organization to have changed.

Those who were given increased responsibilities in this exercise/organization were found to like it better as well as rate the organization as better.

Furthermore, it was pointed to some inherent problems with the division of responsibilities per se; as people had been used to having clear boundaries for their tasks and responsibilities, some were reluctant to assume responsibility for new and/or additional domains, which the new organization required. This was linked to a classic problem found in bureaucratic type organizations; people becoming very rigid when working in a system with strict division of responsibilities (Morgan, 1997). Hence, running into problems when introducing a change to a previously bureaucratic type system, should not be surprising. Maybe the reluctance could be looked upon as a good sign, as it indicates that organizational change really has been introduced.

4.5.2 Cooperation

It was found that good teamwork depended on training together within the organizational structure. This was linked to research within “natural decision-making”, which have demonstrated that teams perform better than ad-hoc groups on decision-making (Orasanu & Salas, 1993).

Results indicated a link between having more responsibility, being more integrated into central processes, and better cooperation. Thus, it seems that characteristics of a decentralized and flat organization, like shared responsibility and high integration of all levels, may have a positive effect on cooperation.

Results furthermore indicated a link between decentralization and contentment with cooperation. This could indicate that teamwork is ameliorated by decentralized control. Such an interpretation is supported by research on team decision-making; democratic leadership has been found to be more effective and advantageous in many respects (e.g., Chidester, 1990; Eisenhardt, 1989; Haleblian & Finkelstein, 1993).

4.5.3 Inclusion into organizational processes

Most respondents seemed to be well included into the organizational and team processes. This was found to be negatively related to seeking information from superior. Additionally, there seemed to be a tendency for people who were more integrated, to integrate their own subordinates more (in terms of sharing information). This was interpreted to mean that the personnel who were well integrated centrally had less need to seek information from a superior as they more naturally gained the knowledge and subsequently possessed more information to communicate to subordinates. Additionally, feeling included by ones own superiors could play a part in producing more inclusive behavior toward ones subordinates. Such reciprocity may be understood as part of the implicit processes included in an organization's culture.

4.6 SOCIAL IDENTITY

4.6.1 Affinity

It was found that the team and the assignment meant most in creating a sense of belonging for our respondents. Age and gender was found to be the least important.

There were pointed to some differences between native and Non-native English speakers. Native English speakers rated nationality/culture as quite a bit more important for their sense of belonging in this environment than did non-native English speakers. They also rated culture as more of a hinder for their information-sharing than did non-native English speakers. This may indicate that native English speakers focus more on culture than non-native English speakers do, both as something positive (giving a sense of belonging) and as something negative (an obstacle for sharing information).

4.6.2 The importance of affinity

There was found a link between finding affinity to be important and an aid to get the job done, and finding the assignment to give a sense of belonging, indicating that a sense of belonging can help people working on the same assignment to get the job done. From another angle, this may also indicate that having a common goal (in terms of assignment) brings people closer (in terms of cooperation and group belonging/identity). This is in line with classic research on group processes; common goals and mutual dependency has the ability to create a common identity (i.e. psychological sense of belonging; see e.g. Hogg & Abrams, 1988) and to bring people even from conflicting groups together in cooperation (Sherif et al, 1961).

4.7 CULTURE

There was found a tendency for people from low Pd cultures to expect their subordinates to manage on their own, while people from high Pd cultures were more liable expect their subordinates to need close guidance[44]. People from low Pd cultures tended to reveal more positive attitudes to their subordinates than did people from high Pd cultures. As indicated

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[44] Results from the qualitative data anlysis.

previously, this supports findings from cross-cultural organizational research (e.g., Bochner & Hesketh, 1994; Clegg, 1981; Hofstede, 1991; Offermann & Hellmann, 1997). Bochner & Hesketh, for instance, found that higher Pd was related to a preference for closer supervision and a belief in the necessity of having to *make* people work hard. Clegg found high Pd to be linked to controlling behavior on the leader's part.

Trust seemed to have a lot to do with familiarity, both in terms of ability to understand and knowing what to expect. The respondents pointed to being able to understand and knowing what to expect, as important factors in relying on other people.

5 REVISION OF THE QUESTIONNAIRE AND VALIDATION

Both qualitative and quantitative data provided input to the revision of the questionnaire. As previously indicated, the actions taken were presented in footnotes alongside the analysis.

In general, it was checked whether the respondents understood the questions as they were intended and whether there were an adequate distribution of answers. If there were detected a problem, the question was either rephrased or cut. Since length also had been an issue for our respondents, measures were taken in order to shorten the questionnaire. This was generally done by cutting what seemed like superfluous or overlapping questions. Additionally, as most open-ended questions had primarily served the exploratory nature of this study, many of them were cut in the revised version. On some open-ended questions, the subject responses provided the background from which additional closed-ended questions were developed.

There were also made some structural changes to the questionnaire; issues that seemed to be natural for the respondents to answer initially, were moved to the beginning, etc. Additionally, the lay-out and some of the phrases were updated in order to make it more readable, clear and user-friendly.

The content validity of the form should have been satisfactorily established by the measures thus described. The feedback given by the respondents, primarily in the interviews, but also through comments that were made in writing, gave indications of good face validity.

In sum, this pilot study gave very useful feed-back and help to the development of the questionnaire. The instrument still has room for improvement, but is in its current form deemed to be useful and valid for the further study of cooperation, information-sharing and organizational processes in a military multicultural environment.

6 LIMITATIONS

Due to the small number of respondents in this study, the results must be understood as only preliminary. It is quite possible that larger samples in subsequent studies, may provide different results. However, since an organizational analysis necessarily is very much connected to the case at hand, one must to a certain degree also expect variation in the findings from different organizations.

7 FURTHER WORK

Both in relation to the development of the questionnaire and the analysis of organizational issues in a military multicultural setting, the current work is not final. It has been conducted as a pilot study, aiming to be followed up by further studies and analyses. Due to a temporary inability to access the culture-data collected in the AW04 exercise, the interaction with culture and nationality will be analyzed in a part II of this report (which will be published shortly). Nevertheless, there is a need to obtain more adequate data on cultural factors, especially in order to achieve the goal; to learn something new about the cultural interaction with organizational processes in military multicultural decision-making settings.

At this time, data has been collected from Norwegian subjects in the Battle Griffin exercise that took place in the beginning of March 2005. This data is in the process of being analyzed as part of the NBD-O project at FFI. As this sample was a homogenous group in terms of national culture, the analysis will not look at culture or language as a factor. There is furthermore a plan in the LTAMC project for further studies at the upcoming NATO exercise AW05 this Fall, and MNE4 (Multinational Experiment number 4) in the winter of 2006.

8 CONCLUSION

This pilot study provided some interesting findings related to the organizational changes introduced in a multinational NATO Headquarter, some anticipated – others not. The study provided some preliminary insights into the organizational processes linked to cooperation. To ensure a richness of understanding, both qualitative and quantitative measures were employed. The instrument developed for this study, an organization-focused questionnaire, proved useful for analyzing the cooperation in the multicultural military setting and was updated according to both the quantitative data and the qualitative feed-back provided to us in the interviews. Although it still has room for improvement, it is deemed to be of value also for further research in this area.

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