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MASTEROPPGAVE

Search and Rescue in the High North, grounded in bilateral agreements between Russia and Norway, our cross-cultural cooperation during exercises and tactical operations.

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Table of contents:

Acknowledgements	1
Abstract	2
Foreword	3
Introduction	3
1.0 Research question - what makes the research interesting	5
2.0 Limitations	5
3.0 Theory	6
3.1 Search and Rescue 3.1.1 SAR Political Framework and management	7
3.1.2 Tactical operations level	11
3.1.3 Norwegian versus Russian Search and Rescue Regions	12
3.2 Culture	13
3.2.1Definitions culture	13
3.2.2 Different approaches to culture	14
3.2.3 Russian versus Norwegian corporate culture	18
3.3 Communication	20
2.0 Methodology	23
2.1 Research philosophy 2.1.1 Desitivism versus Hormonoutic approach	24
2.1.1 Fositivisiii versus Hermeneutic approach	25
2.2 Research design	26
2.2.1 Choice of Method	26 29
2.3 Data collection	28 24
	54
3.0 Empirical knowledge	34
3.1 Historical events leading to the establishment of Barents Rescue	34
3.2 Barents Rescue	36
3.2.1 Early exercises	38
3.2.2 Exercise Barents Rescue 2013	40
3.3 Barents Rescue	
4.0 Discussion	48
4.1 Search and Rescue	48
4.2 Culture	51
4.3 Communication	52
5.0 Findings and resume	56
References	

Arctic Search and Rescue Agreement. Areas of Application. Illustrative Map



Source Norwegian Ministry of Justice and Public Security

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Source Barentsobserver June 2014.

Abstract

In my thesis I study the implications cultural differences have on communication and coordination in management and tactical operations of Search and Rescue (SAR) in the High North border region between Norway and Russia. I have conducted interviews with Norwegian and Russian users and tactical operators of SAR to the extent possible. When I have not been able to find interview objects I have turned to secondary information such as written documents, interviewing persons who has knowledge of the matter and observations. All my respondents work within SAR or have used SAR services to an extent. As this is a new field of investigation I have used well established theories within cross-cultural differences for corporates, assuming these theories are applicable within the area of Search and Rescue, theory for communications, as well as international standard theories and regulations for Search and Rescue. Assuming that the Norwegian and Russian national culture contexts are different, as well as there are differences in terms of formal and informal communications, I hope to reach a better understanding for Search and Rescue cooperation in the High North, and to understand which elements are essential to conduct proper Search and Rescue services in a demanding and extreme environment.

Foreword

My thesis on Search and Rescue is a product of my study in Master of Business Administration – Business in Russia at the University of Nordland, and my interest in maritime preparedness and safety. When I started this thesis I had no idea of how confusing and how fascinating it would be to look into the matter. My educational background is far from scientific, and as such I have struggled in building my thesis as well as trying to find the correct language for communication. I have studied travel and tourism, Russian and journalism at University level. In addition to this I have a background as a volunteer sea rescuer with Redningsselskapet. I realised very early after I started the MBA program in August 2011 that I would like to write a thesis on Search and Rescue in the High North and cultural differences between Norway and Russia. From my work in Travel and Tourism I have experienced the importance of understanding cultural differences when dealing with people from other countries. When our lecturers in the MBA referred to cultural obstacles they had experienced when dealing with each other and the respective countries I could only nod and agree, as I had learned through travel and tourism the importance of knowing the culture of the country I wanted to do business in, and as such I have studied behavioural culture of Great Britain, India, and Russia at an earlier stage. I realised that any Mass Rescue Operation – MRO – in the High North would require cooperation between several countries, and in maritime MROs we would very likely cooperate with Russia, a country with not only a very different culture, but also very different in communication. I decided to study the phenomenon closer with a perspective on the future maritime development in the High North.

Introduction

High activity in the North, and growth of the petroleum sector, tourism, mineral extracting, and cargo transport makes it interesting to look at the challenges expected in the Arctic. Challenges like cultural and language differences, climatic conditions, low temperatures, long distance to shore-based resources, rough communication, low visibility, and winter darkness needs new methods for planning of Search and Rescue. My hope is that this paper will shed some new light on Search and Rescue, and that it will be usefull by actors in the area as a background analysis for further research and planning to find the *"innovative and viable solutions to reduce risks, build resilience, secure commercial operations"* (Arctic

Frontiers 2014), and to help reach the vision of SARiNOR; "Norway is world leading in planning, coordinating and implementing of SAR in the Northern Hemisphere."

The context of my choice of study is the possible increasing traffic in the Barents Sea, and the Arctic in general. We must not forget that Noways coastline from N 69 degrees, is considered the Arctic by most states. The area is a vast hinterland we share with Russia in the East, and Greenland in the West. At the 2009 Ministerial Meeting in Tromsø, the Arctic Council decided to establish a Task Force, with a mandate to develop an international instrument on cooperation on Search and Rescue operations in the Arctic. With the increasing human activity and business development, this topic is one of the most important to develop as soon as possible. On one hand have bilateral agreements between Norway and Russia regarding SAR, such as the "Agreement between the governments in the Barents Euro Arctic Region on cooperation within the field of emergency prevention, preparedness and response" Signed in Moscow December 11, 2008 by Norway, Russia and Sweden. And on the other hand we have common training such as the exercise Barents Rescue conducted every other year. The last exercise Barents Rescue was held in Troms County September 16-19 2013, including participants from Norway, Sweden, Denmark, Iceland, Russia, Finland and observers from several areas. The importance of the issue is made visible by the Arctic Frontiers conference on Search and Rescue held in Tromsø in January 2014 in Tromsø. Aqvaplan Niva hosted 1 week of lectures and scientific talks in the range of operational SAR, new laws for the Arctic, and technicalities such as new satelites in the area to reach a better radio and telephone coverage. And last but not least the project SARINOR and MARPART, the first led by M aritimt Forum and the second by the University of Nordland. There is no doubt that the area is of interest, however new in terms of research.

I have always been intrigued by Russia and her relationship to western countries, After working as a volunteer with RSRK Tromsø Sjøredningskorps, finding this work very rewarding, and seeing the development in the High North my choice of master thesis was clear to me very early. My intent is to be as clear as possible about my research. I will read as much as possible on my subject to keep my motivation and inspiration at the highest level. By picking a topic I am passionate about, something that can help me in my career I believe I will be able to work hard to present a good research report.

The aim with this thesis is to see if there are any areas within Search and Rescue that demands special attention.

This report is built up with chapters including acknowledgement, an abstract, foreword and introduction describing background history, goals and the context for the study; the research question, a theoretical chapter explaining the chosen theory; a methodology chapter describing research philosophy, research design and methods used to find answers on my questions, an empirical chapter describing my case and its history, a discussion, findings and the end.

1.0 Research question - what makes the research interesting

The purpose of this study is to describe and analyse the exercise Barents Rescue and the try to show the importance of making the different resources train together. To further indicate how important Rescue and Preparedness exercises are, I will describe three incidents where Norway and Russia had to cooperate as two of the incidents involved Russian accidents in Norwegian territorial grounds, and the third had an impact on Norwegians, and the understanding of Russian mentality. The incidents are a short description of the Titanic incident, followed up by the grounding of Maxim Gorkij, and the sinking of the submersible "Kursk".

Investigating the cooperation between Norway and Russia regarding Search And Rescue in the Arctic Barents sea region, to better understand how the politics and operational systems work in Norwegian and Russian sector. Is it important to train to be prepared for incidents?

2.0 Limitations

Search and Rescue is a very large research area, thus I initially had to draw up some lines as to what to look into. The area of research could consist of a general Search and Rescue survey, to look at the resources at hand for Norwegian Search and Rescue authorities, it could consist of looking into the Northern Sea Route, or maybe what can happen if the ice really melts in the North Pole. I have chosen to limit my research to exercise Barents Rescue in Norway 2013. This exercise shows co-operation between several countries, however my focus is limited to the cross-cultural cooperation between Norway and Russia. I have tried to

conduct this study as thorough as possible in my position. Whether I have succeeded or not will be up to the readers to decide.

3.0 Theoretical chapter

Already in the seventeenth century the "Freedom of-the-seas doctrine" limited national rights and jurisdiction over the oceans to contain a narrow belt surrounding the nation's coastline. The rest of the sea was free to everyone. This situation continued until nations worldwide claimed jurisdiction over offshore resources. Addressing this new situation the Convention on the Law of the Sea was established in 1982, stating that all Coastal States, that have a border to a part of an ocean, have a 12-mile territorial limit out at sea. Within this limit all states have sovereignty to enforce any law, exploit resources, and regulate the area. "*Arktiske Utfordringer*." *Geir Hønneland 2012*.

3.1 Search and Rescue

To understand Search and Rescue is to have knowledge about a complex area, involving international, regional and national legislations, laws, regulations and agreements. It involves management on regional, national and local level, cooperation between military and civilian resources, and competence on communications on technical level, as well as on the human level, where persons interact through sending and decoding oral and written messages to each other. If you want to involve yourself in search and rescue the understanding of all aspects is important. SAR services often involve interactions with foreign nationals, and can take place in the borderland between two or more states, or across borders. Cultural understanding is important not only between two or more states, but also between different organisations within a state, like business culture, national culture and religion. There is also a need to understand the acronyms used within the language of SAR (Search and Rescue), as well as understanding the definitions of operations. An overview of the different resources in SAR is helpful. Knowing the means of communications, as well as to understand the language of SAR, as used during training and operations is crucial, particularly since this is the area where most of the bottlenecks and misunderstandings during tactical operations occur. The SAR system is grounded on a structure to provide services for persons or vessels in distress. The service is divided into: a) the ability to receive, acknowledge and relay distress calls, b) the professional ability to handle and coordinate search and rescue responses, c) the responsibility to deliver survivors to a safe place, and d) to provide triage and any initial

medical assistance required. According to the International Maritime Association –IMO, and the International Civil Aviation Organization – ICAO persons in distress are to be assisted without hesitation "regardless of their locations, nationality or circumstances." Harmonization of SAR services are to be promoted by State authorities, to save property, to reduce loss of life and suffering, to ensure safety for commercial maritime and aeronautical traffic in risk areas during natural and man-made disasters.

3.1.1 SAR Political Framework and management

First of all Search and Rescue (SAR) can be described through the laws and regulations all coastal states have agreed upon internationally, regionally, nationally, and locally. The Search and Rescue system is divided into global, regional, national and local SAR system organizations. The global system is coordinated by International Maritime Organisation (IMO), and International Civil Aiviation organisation (ICAO), to provide assistance, and SAR services whenever, and wherever needed world-wide. The service is meant to serve anyone in distress within any Search and Rescue Region (SRR) without regards to nationality or circumstances. The global SAR system eliminates the need for member states to provide assistance in other states search and rescue regions for national vessels. ¹ Even if ships have an obligation to assist each other in case of an emergency by tradition, as well as by law there was no international system which could conduct Search and Rescue operations until the adoption of the SAR convention as late as 1979. The SAR convention divided the world's oceans into 13 search and rescue areas, where the countries concerned according to having a coastal line are responsible to conduct SAR .²

¹ The SAR services in international conventions and laws contains: The International Convention for the Safety of Life at Sea (SOLAS) 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980. The convention has been updated and amended several times and is considered the most important international treaty of safety for ships. Historically the first version saw light after the Titanic disaster in 1914. The main objective is to ensure safety at sea by specifying" minimum standards for construction, equipment and operations of ships"

http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx

The International Convention on Maritime Search and Rescue (SAR) 1979, Adoption: 27 April 1979; Entry into force: 22 June 1985.

² http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Maritime-Search-and-Rescue-(SAR).aspx

The UN Convention on Law of the Sea, 1982; Article 98, paragraph 2:

"Every Coastal State shall promote the establishment, operation, and maintenance of an adequate and effective search and rescue service regarding safety on and over the water and, where circumstances so require, by way of mutual regional arrangements, co-operate with neighbouring states for this purpose."

The laws and legislation of SAR are established in a country to understand that the responsibility of search and rescue in territorial waters are the states responsibility. To deal with this IMO and ICAO requirements, and standards may be used as a base of the SAR procedures. The state also responsible to establish Search and Rescue agencies, and assign general responsibilities, as well as define the Rescue Co-ordination Centres (RCC) jurisdiction and legal authority, as stated in IMO and ICAO standards. The Search and Rescue of each state must be in accordance with international laws. The general concerns for saving lives versus protecting the states sovereignty is addressed by international laws. *"Neighbouring states should seek practical means to balance these concerns for situations where entry of foreign SAR facilities into territorial waters or territory may be necessary or appropriate"* (IAMSAR manual 2013). However, different cultures and different ways to organise the government may make this impossible.

Norway and Russia signed an agreement on Search and Rescue for persons in distress in the Barents Sea in October 1995. The agreement is founded in the international Convention on Maritime Search and Rescue from 1979, and it is an extension of an agreement between Norway and Russia from 1957. The agreement include the shared responsibility between the two countries, the possibility to conduct operations in the other States territorial waters, regulations for communicating the necessity to cross borders, and the ability to request assistance from the other part under operations. (Ministry of Justice and Public Safety) The latest agreement is the "Agreement between the Governments in the Barents Euro-Arctic Region on Cooperation within the Field of Emergency Prevention, Preparedness and Response". ³The BEAR is a Joint Committee established to "strengthen and expand ongoing, transboundary, emergency and rescue services co-operations at county level in order to

³ This agreement was developed between Finland, Norway, the Russian Federation and Sweden, and it was signed on 11 December 2008 in Moscow. The Agreement was ratified by all Parties on 17 May 2012.

improve the interoperability of emergency and rescue services functions in the Barents Region."⁴ The Barents Euro-Arctic Region has developed a Barents Joint Rescue Manual to be used in emergency situations, as well as describing and instructing implementation of the Agreement. According to the information on the BEARC the aim for the co-operation between the countries implied is to improve the possibilities for co-operation between the search and rescue units across the neighbouring borders. Such increased co-operation can make optimal use of the widely spread resources, and provide assistance faster and possibly more directly. Each states specialist functions would be made available to neighbours in need. As described in the IAMSAR Manual any Regional cooperation will theoretically enhance cooperation between states, be cost effective, improve distribution of distress alerts, improve coverage of distress alerts and improve the service of SAR. (IAMSAR Manual I-III)

Looking at *management* there is a lot of considerations to take into account. Strategies need to be revised as conditions changes globally, regionally and nationally. Decisions must be made on which level the SAR system will operate. The Regional system is described as the area where two or more states cooperate in a search and rescue region. A Regional SRR is the area in which each state has a responsibility to conduct SAR services according to distress alerts in their territorial waters. Theoretically two states can support each other with Search and Rescue Units (SRUs) in an ocean area to which they both belong, to increase the readiness and coverage in the same area. Moreover, training and mutual exercises between two or more states is also very important for the same reason. According to IMO, parties who cooperate in a Regional system have a better chance of exchanging information, coordinate and to have a mutual vocabulary, and understanding of each other's procedures. Co-operation within SAR can develop a domino effect such as trust and cooperation between states on other areas, like common security and commerce. However, even with the benefits earned through cross-border co-operation, regional systems may not be the best solution for every state.

In national SAR, it is natural for to look to Svalbard, as this is an area in dispute among many countries. Is this a regional or a national Search and Rescue Region (SRR)? Norway exercise authority around Svalbard according to the Svalbard Treaty of February 9, 1920, enforced in 1925. The treaty includes land territory, internal waters and islands within 4 nautical miles, between 10 degrees and 35 degrees East longitude and 74 degrees and 84 degrees North latitude. In 2009 the Norwegian Continental shelf was increased by a decrete from the Convention of the Sea commission to also include these areas more than 200 miles from

⁴ http://www.beac.st/in-English/Barents-Euro-Arctic-Council

Norway mainland: "Smutthullet", Smutthavet" and the "Nansen pool". Finally in 2010 Norway and Russia agreed on the Delimitation line from the Norwegian/ Russian mainland border to the North Pole (Geir Hønneland. 2012). To me Svalbard can theoretically be in a grey zone between regional and national search and rescue regions, however I assume the Svalbard SRR is within the national SAR system. This is also the way it has been treated up till today. However, as the importance of the Arctic region increases who knows what the future will bring.

The National SAR system is a State which independently establishing its SRR within its geographical territorial waters, and other sea areas acceptable to the neighbouring States. Within the SRR a Rescue Coordination Centre $(RCC)^5$ is essential to organise the SAR services and coordinate SAR operations. The RCC can be an aeronautical centre ARCC, a maritime centre MRCC, or a joint centre for aeronautical and maritime operations JRCC (Joint Rescue Coordination Centre). The advantage of a JRCC, is better capabilities; fewer facilities to maintain and coordinate, cost reducing, better information exchange, and a less complex alerting phase during distress. These responsibilities are carried out by the national SAR organization. (IAMSAR Voulume I. 2013). The Norwegian Search and Rescue Region is organised from the Ministry of Justice and Public Security. The next levels are, the Rescue Co-ordination Centres, RCCs; JRCC – SN, Hovedredningssentralen Sør-Norge Sola, in Southern Norway and JRCC – NN, Hovedredningssentralen Nord-Norge in Bodo, Northern Norway. The Russian Search and Rescue Region is organised by the Ministry of Affairs of Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters and EMERCOM and different MRCCs.

Search and Rescue may be managed at the local level through a Rescue Sub-Centre RSC.⁶ Theoretically the RSC better exercises the direct and effective control over the SAR facilities in a particular area. Such an area could be a territorial area where local facilities politically or administratively, can be controlled by local authorities more effectively than from the main RCC. The RSC will have greater authority in remote areas, where communications in particular are difficult. The local RSCs would be police departments, also referred to as LRS, and/or Sysselmannen on Svalbard.

⁵ Definition on RCC: "A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region."

⁶ Definition RSC: "A unit subordinate to a rescue co-ordination centre established to complement the latter according to particular provisions of the responsible authorities.

3.1.2 Tactical operations level

The distress situation, describing the actual activity happening as a person or craft needs assistance due to an emergency at sea, on land or in the air is perhaps the easiest description of SAR to understand as it is very visible and very often reaches headlines in the news.⁷

When Search⁸ and Rescue⁹ is initiated co-operation between civilian and military resources, between professional and volunteer resources, and between different national cultures are often very important. To be able to assist in a distress situation it is important to know what resources are needed and available, to assist the resources in their cooperation, to understand the technical aspect of communication as well as oral communication, and to know what to do without hesitation. Thus exercising and training is very important, and in some situations crucial as we will see later in the descriptions of the incidents and operations leading to exercise Barents Rescue in the empirical chapter. The resources are SAR personnel, often ordinary people who have a deep interest in helping others under extreme circumstances. Persons with the knowledge necessary to do a good job in a distress situation, and are trained for the purpose of assisting others in distress situations, very often in demanding surroundings. Training and experience is very important to make the right decisions at the right time, to respond properly. SAR facilities like rescue crafts, helicopters, planes, ambulances are also described as resources in rescue operations. According to the IAMSAR manuals SAR facilities are described as SRUs, a unit of trained personnel which are provided with proper equipment to conduct the services of Search and Rescue. A Search and Rescue Unit is able to reach the scene of a distress situation quickly and they are ready to perform operations like "providing assistance to prevent or reduce the severity of accidents and the hardship of survivors, conduct a search, deliver supplies and survival equipment to the scene, rescuing survivors, providing food and medical or other initial needs of survivors, and to deliver the survivors to a place of safety." (IAMSAR Volume I. 2013)

⁷ Distress situation: "A situation wherein there is reasonable certainty that a vessel or other craft, including an aircraft or a person, is threatened by grave and imminent danger and requires immediate assistance.

⁸ Definition Search: "An operation, normally co-ordinated by a rescue co-ordination centre or rescue sub-centre, using available personnel and facilities to locate persons in distress."

⁹ Definition Rescue: "An operation to retrieve persons in distress, provide for their initial medical or other needs and deliver them to a place of safety."

Definitions according to the IAMSAR Manual volume I.

During SAR tactical operations several stages are initiated. The first one being the *Awareness stage* when the search and rescue organisation becomes aware that someone needs assistance. *Initial action* follows, and information about the situation is processed and decoded to evaluate the emergency before rescue facilities and personnel are deployed. To help determine the necessary action three emergency phases are evaluated; *the uncertainty phase, the alert phase and the distress phase*. Reclassification of emergencies can occur depending on the development in each case. Following the Initial action stage is the *Planning stage* where the SAR response is planned. Planning is crucial to ensure SAR mission success. The *Operation stage* include all tactical activities taking place during the search for distressed persons or vessels, the rescue, evacuation and transport of survivors to a safe place. The Search and Rescue Mission Coordinator (SMC) oversees the operation to make sure the search plan is received, understood and followed by Search and Rescue facilities. The last stage is the *Conclusion stage* which is entered when the distressed person or craft is no longer at risk, or located and assisted, or if the SMC determines that there are no survivals or no means to salvage the craft.

3.1.3 Norwegian and Russian Search and Rescue Regions

Each state is liable for commencing Search and Rescue Services in their territorial waters. Thus it gives importance to agreements on the States borders. In 1982 on April 30 the Convention on the Law of the Sea was established, and on December 10 the same year Norway signed the treaty. On November 16 1994 the convention came into force. "Arktiske Utfordringer." Geir Hønneland. 2012

The convention states that all Coastal States, defined as states bordering to a part of an ocean, have a 12-mile territorial limit out at sea. Within this limit each state has sovereignty to enforce any law, exploit resources and regulate the area for any use. However all ships have the right to "innocent passage". "Innocent passage" is defined as transport through the area in a manner which does not violate state laws or threaten security. "*Arktiske Utfordringer*." *Geir Hønneland. 2012*

Also to principle on the 200-miles zone in the convention of the sea, gives any state the exclusive right to sustain and exploit the natural resources within the territorial waters. Around Svalbard Norway exercise authority according to the Svalbard Treaty of February 9, 1920, enforced in 1925. The treaty includes land territory, internal waters and islands within 4 nautical miles, between 10 degrees and 35 degrees East longitude and 74 degrees and 84 degrees North latitude. In 2009 the Norwegian Continental shelf was increased by a decrete from the Convention of the Sea commission to also include these areas more than 200 miles from Norway mainland: "Smutthullet", Smutthavet" and the "Nansen pool". Finally in 2010 Norway and Russia agreed on the Delimitation line from the Norwegian/ Russian mainland border to the North Pole. (*Arktiske Utfordringer.* "*Geir Hønneland. 2012*). The importance in understanding the borders is important for the SAR service planners as the SAR system locally and regionally is to be provided within each member states territories, territorial seas and high seas, as a part of the membership obligations of the Safety of life at Sea convention, the International Convention on Maritime Search and Rescue and the Convention on International Civil Aviation.

These responsibilities are carried out by a national SAR organization, which establishes a Search and Rescue Region (SRR) to define the responsibility for co-ordinating responses to distress situations world-wide. (IAMSAR Voulume I). The Norwegian Search and Rescue Region is organised from the Ministry of Justice and Public Security. The next level down, the Rescue Co-ordination Centres are Hovedredningssentralen Sør-Norge Sola in Southern Norway and Hovedredningssentralen Nord-Norge in Bodo, Northern Norway. The Russian Search and Rescue Region is ministered by the Ministry oo Affairs of Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters and EMERCOM. The SRC is EMERCOM/ MRCC Murmansk.

"Arktiske Utfordringer." Geir Hønneland. 2012 http://www.un.org/depts/los/convention_agreements/convention_historical_perspective.htm# Historical Perspective

1.2 Culture

Describing culture I have chosen to focus on three different authors with different contexts to study the difference between Hofstede's and Hall's descriptions and comparisons between Norwegian and Russian culture, to establish understanding and to see if the authors have some common factors of Russian and Norwegian culture. My study of culture is based upon corporate culture which I assume will be valid and transferable to Search and Rescue.

1.2.1 Definitions culture

Culture is defined in many ways as a society with its own traditions and customs, and as art, music and literature created by man. I will focus on the definition of culture as "a way of

thinking, behaving, or working that exists in a place or organisation. "<u>http://www.merriam-</u> webster.com/dictionary/culture

The Oxford Dictionary definition *"The attitudes and behavior characteristic of a particular social group"*

Being able to manage the culture differences between countries is often the key to secure an agreement or a contract with your international counterpart. Understanding that you cannot know enough about other cultures is a very true.

1.2.2 Different approaches to culture

There are several different approaches to culture understanding. The two authors Hill¹⁰ and Ulven¹¹ both refer to The High-Low context classification developed by E.T. Hall. This classification is a framework to help us understand how to do business, and how to maintain interpersonal relationships internationally. Hill describes Russians as *"cautious, strategic negotiators who will push hard to identify and capitalise on factors that can be leveraged to their advantage"* (Hill 2009). He also claims that negotiating habits of Russians are shaped by the inhospitable environment of the country, he follows up by describing the Russian as a cautious and pessimistic negotiator, created by climate centuries of oppressive and cynical governance. Knowing and understanding these issues are important Hill claims.

In Ulvens description of Edward T. Halls model of the High Context areas, the form and context of what is said, is as important as what is said. Age, social status, religion, what you wear, time among others is highly valued. Moreover the feeling of "loosing face" and being able to trust the opponent is essential. In Low Context areas more power is in what the person is saying, not looking for revealing body signals when interpreting the communication.

Another description of the Russians and their culture is found in Daniel Mc Carthy's "Corporate Governance in Russia". His article defines culture as "*a set of beliefs shared by members of a society or group as to how things ought to be*" from Schein, 1985. According to McCarthy these beliefs arise in school systems, religious organizations, parties, and from family members. Another of McCarthy's claims is that if problems and pressure occurs, Russians will very often turn to the old traditions, the soviet way, and basic values to cope. He

¹⁰ Managing Cultural Differences. 2009

¹¹ Internasjonal Skikk og Bruk. 2004

discusses three interrelated cultural characteristics that I find interesting, and their potential influence on the Russian corporate system. On one hand he argues that tradition of avoiding Laws and Directives has deep roots in the history, and political system of Russia. From the Tsar Empire, to the communist regime there are several examples of how the higher level authority claimed that the laws were not made for them, thus the common person answered by withholding the truth about their production, preventing unreasonable behaviour. Russians have a tendency to distrust individuals, groups or organisations to which they do not have a personal relationship. The mistrust grew out of a harsh political environment such as the communism, causing individuals to withhold important information needed to make the system work, as we will see from the short presentation of the "Kursk disaster" in the empirical chapter. Russians also rely on personal networks such as trusted friends and close colleagues, to obtain information, solve problems, admission to educational institutions, jobs and other objectives.

In this particular research study I lean towards Geert Hofstede and his Power Distance Index. According to this there are four different ways of cultural differences between countries. These are Power distance, Collectivism, the Need of Avoiding Uncertainty and Masculinity versus Femininity. Ulven in his article on culture describes the four different indexes generally, whereas Håkon Skretting in his article: "How to Establish Cross-Border Business and Become a Part of the Existing Supply Chain" emphasises Russian vs Norwegian business culture.

Norwegian Culture	Russian Culture
Low Uncertainty Avoidance	High Uncertainty avoidance. Cultures in
Cultures in which people are comfortable in	which people prefer predictable situations
unpredictable situations and have high	and have low tolerance for ambiguity.
tolerance for ambiguity.	
	High Power distance
Lower Power distance	A society that views an unequal distribution
A society that views an unequal distribution	of power as relatively acceptable
of power as relatively unacceptable	
Femininity	Masculinity
Cultures in which people value maintaining	Cultures in which people value achievement
good relationships, caring for the weak, and	and competitiveness, as well as acquisition of
quality of life.	money and other material objects.
Individualism	Collectivism
Cultures in which people define themselves	Cultures where people have stronger bonds
as individuals and form looser ties with their	to their groups and group membership forms
groups.	a person's self-identity.

Hofstedes cultural values

"Power distance: This dimension deals with the fact that all individuals in societies are not equal – it expresses the attitude of the culture towards these inequalities amongst us. Power distance is defined as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally.

Individualism: It has to do with whether people's self-image is defined in terms of "I" or "We". In Individualist societies people are supposed to look after themselves and their direct family only. In Collectivist societies people belong to 'in groups' that take care of them in exchange for loyalty.

Masculinity: A high score (masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner/best in field – a value system that starts in school and continues throughout organisational behaviour.

A low score (feminine) on the dimension means that the dominant values in society are caring for others and quality of life. A feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable.

The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety and different cultures have learnt to deal with this anxiety in different ways" (http://geert-hofstede.com/russia.html)

Both Ulven and Skretting emphasise the importance of understanding and respecting cultural differences, as well as the importance of paying attention to the main cultural differences between two or more cultures. According to Skretting Norwegians may have problems in understanding the Russian term "corridors of power", as decisions in Russia are often made before the meeting starts, as opposed to Norway, where decisions often aspire out of prolonged discussions, and are made by consensus. Russians managers make the decisions, and employees receive clear instructions what to do. In Norway business managers often act as coaches for their employees, and keep their door open, willing to engage in discussions at any time. Compared to Russia the door is closed and guarded by a secretary. Russian business managers make decisions and give orders downwards. The Russian culture is similar to the description of the cultural "*Hierarchy*" described by Jacobsen and Thorsvik. In the hierarchical cultures fundamental values are created through predictable and stabile processes, and control of the processes and people in it. Co-ordination, supervising, and control are

central elements. The Norwegian culture has a larger area of description; as a "*Clan*" where efficiency is created through co-operation, and the manager is the team coach, as an "*Ad-Hoc-Cracy*" where innovation is the greater focus, and the values sought for are creativity, flexibility, ability to combine products in new ways, and find new ways to look at the world, or as a "*Market*" culture where the ability to compete is the focus. I find Halls model easier to understand, and it is easier to use when describing the differences between Russian and Norwegian behavior during criseses.

3.2.3 Russian versus Norwegian corporate culture

The **business culture in Russia** is composed by a mixture of "The winner takes it all", paranoia, opportunism, corruption, and lack of transparency (Innovajson Norge lecture Nov 2012 Murmansk)

Russia has been through large changes since 1985 (Article on Gorbatsjov), Glasnost, Perestrojka, and constantly changing reforms. By leaving the Soviet government and the plan economy, moving into market economy, Russia and her people had to accept huge changes in laws and regulations, attitude and changes within technology and know-how. Quite a few Russians have been smart enough to exploit the opportunities that rose within educational and exchange programs between Norwegian and Russian Universities, exchange business to business between Norwegian and Russian companies, and more generally participating in meetings, conferences and cooperative exercises.

In Russian business we will find concepts like: «1. Common responsibility –Krugovaya poruka: one for all, all for one. A group of people or a family stick together and help each other out, or lend a helping hand whenever someone in the group needs it. This is the Asian heritage of Russia. 2. Fabricated evidence, revealing illegale or unfortunate happenings - kompromat. 3. Black PR, trash about someone in media, negative reputation – chernyj piar. 4. To have access to resource persons who can lobby for you inside the bureaucracy – administrativnye ressursi» (Den besværlige virkeligheten. Norske bedrifters erfaringer fra næringsvirksomhet i Nordvest-Russland 1990-2010. Sherpa Consulting).

To succeed in Russia it is important to understand the factors described above. It is important to realise that you need to spend time and resources to understand the Russian society, which is so totally different from ours. We need to understand the concepts of formal an informal networks, formal and informal practices, the unwritten rules. We have to understand where the decisions are made. It is essential to listen to those who have been in Russia doing business for years, those who have failed as well as those who have succeeded. We need to

find support in the informal networks, spend time and resources to build our businesses within the laws and legislations of Russia. We must be meticulous in our accounting, licenses, approvals and customs declarations. It is imperative that there is some Norwegian management present in the Russian branch of the business, and we have to choose the organisation of the business carefully. If there is any Russian management in the organisation, we need to control the permissions given to them. Last but not least, the business needs to be grounded in the country of origin, and the management at home needs to understand the challenges and differences players in the Russian field encounters.

When time is right to establish a business project in Russia you would want to formalize your ideas in a business plan. This step is more important in Russia than in Norway. Try to keep a focus on cooperation with Russian officials and businesses in the sector you want to get into, focus on your combined strength and be "real partners". (*Frode Mellemvik. Murmansk 2012*). To groom your network it is important to meet each other often and to commit to each other, this will establish trust between you and your Russian colleagues. Be open to learning about the Russian culture and their way to enact in business. As all strategic plans you need to focus on the long-term, plan for the future. Doing business in Russia takes time and will require patience from you. Make sure you secure your financial resources, many Norwegian companies have lost everything by being too naïve. More success factors are competence, making friends and ground your business with the local authorities.

Corruption: is widely spread in Russia. It is important to not be engaged in this – Anti bribary act of Norway and Great Britain which can prosecute you in your own country. Some of the Russian corruption does not necessarily break the law directly and it is hard to understand, a lot of Norwegian businessmen leave this to their Russian contacts. A lot of what is considered corruption in Russia you will find in Norway as well as fees and registered payments. Some parts of the corruption in Russia could be considered as a contribution to a society in need of technical equipment. The other side are the officials who demand payment to get you into a meeting and officials within the police department and the taxation office (Den besværlige virkeligheten).

Kompromat: Security work "Kompromat" is an area Russians spends a lot of resources. The definition of this security work is to gather evidence that can be used against you in the future. This evidence could be published through media or it could be sent to the taxation officials. Mostly this occurs between Russian competitors, however it is nice to know

1.3 Communication

In today's rapid changing world communication is assumed to be the most important factor in organisations and their cooperation internally and externally. Increasing needs for know-how makes working in teams more important, working in teams demand coordination which in the end increases the need for good communication. Working across large geographical areas, across regions, demands great coordinating and communicating skills. In the case of SAR communication is important to send information, to gather information for strategic and tactical planning, to coordinate tactical operations, to build relations nationally and regionally, and to create foundations for cross-border and cross-cultural cooperation. Maybe communication could even build a new regional culture for cooperation within Search and Rescue, which also could infect other political and industrial areas positively. Communication is a dynamic the process of people talking or writing to each other to relay information of some kind, the way we send and receive messages with the purpose of exchanging information. The focus is on the information relayed between persons. Communication is both verbal and body language, making the process slightly more complex. It is not enough to merely understand and decode the other actor's language, but also to decode the body-language, voice-pitches and other non-verbal signs to understand what is being said. As people interact in information sharing by communicating with each other we also need to remember that everyone brings their own culture, history, feelings and beliefs to the conversation. (Hvordan Organisasnjoner fungerer. Jacobsen og Thorsvik2013). Defining communication from dictionaries: "1. The act or process of using words, sounds, signs, or behaviour to express or exchange information or to express your ideas, thoughts, feelings to someone else. 2. A message to someone: a letter, telephone call, radio message. 3. The way of sending information to people by using technology." http://www.merriamwebster.com/dictionary/communication, and: "The imparting or exchanging of information by speaking, writing, or using some other medium: 1. A letter or message containing information or news. 2. The successful conveying or sharing of ideas and feelings. 3. Social contact 4. Means of sending or receiving information, such as radios, telephone lines or computers. "http://www.oxforddictionaries.com/definition/english/communication

Within Search and Rescue the communication process involve the definition as an act or process to express or exchange information, as well as the definition as a means of technology to send or receive information between two or more parties. These acts are equally important, and very often one of the areas resembles problems in SAR, as we will see in the analysis. In organisation the communication process is defined as determined activities where information is transferred from one actor to another, in a dynamic process where the relationship between the sender and receiver changes. (Jakobsen/ THorsvik 2013). There normally are at least to actors in the communication process, the sender and the receiver. Jacobsen and Thorsvik's model on the communication process draws a picture telling us that in all communication processes needs to identify a veritably who's who in the process, as well as how the actors behave as sender and as receiver. Fig Communication process page 281. Moreover, the model shows us the interaction between the actors and how they over time make their own decisions and how they will try to affect the opponent's initial belief. The model illustrates three important areas in the communication process:

- "Communication starts with an initial sender who codes information by formulating and expressing in symbols, verbal or non-verbal, the message he/she would like to send to another party.
- 2. The sender must choose a channel for which he/ she will transfer the message through. Such channels may be oral or written, formal or informal.
- 3. The receiver must decode the information he/she receives to understand the meaning and intent of the message relayed.
- 4. The receiver must answer the sender to let him/her know that the message has been received, thus the receiver becomes a sender and the process starts all over" (Jacobsen & Thorsvik 2013)

Effective communication occurs when sender and receiver understand each other, when the receiver understands the message sent, and the sender and the receiver develop common knowledge. (Jacobsen & Thorsvik 2013). The best possible way to achieve this goal is if the sender can understand the situation the receiver is working in, the culture which the receiver belongs to, and communication channels used in the receivers environment.

Communication problems often occur: If the sender chooses words, symbols and language which express something other than the intent, or more than intended. Whether the sender has formal status, credibility or is trustworthy will affect the receiver's behaviour to the message. The choice of communication channels is important according to Jacobsen and Thorsvik, and people will often choose the channel which has the ability to forward "rich information". Forwarding rich information is conducted through channels that can transfer multiple signals at the same time, which gives the opportunity for quick responses, and possibilities for using a natural language, also these channels contains enough space for the sender and receiver to be personal and adapt the messages to each other. According to several studies, subjects prefer face-to-face communication when the intent is effectiveness. Cross-cultural communication demands richer communication channels. The last two elements for choosing communication channels, and very important in SAR, is the necessity for confidentiality, and the possibility to store information in case it is needed during an investigation mm.

Communication is divided into *vertical* and *horizontal* communication. Vertical communication is hierarchical and causes problems because the hierarchy will suppress communication and social cooperation between the manager and worker. The hierarchy will affect the amount of information communicated upwards, causing loss of important information, screening, and a long timeline between sending the information and the decision makers receiving it. Screening the information can be positive in a well-working hierarchy as the decision maker only receives the information needed to make the decision. Also replies from employers to managers often are inadequate and untrustworthy as it travels through several points in the hierarchy. Very often low level employees, and managers supress negative information to make sure they are not put in a bad situation. "It is naïve to believe that employees will relay bad information about themselves to managers" (Jacobsen & Thorsvik. 2013: 291). Horizontal communication focuses on communication between persons on the same level, with equal tasks, interests and experience, making it easy to talk together and understand each other. Persons on the same level often have the same level of competence giving them a common language and symbols enabling them to understand the common communication. At last persons on the same level, working together, have daily face-to face contact making communication easier.

Communication between organisations and more than one actor require larger communication networks. Such networks also have vertical and horizontal communication. Two particular types of networks are central: Communication networks in groups which focus on building groups that are effective to solve special tasks, and communication networks between organisations, where focus is on who talks to who and the content of the communication. There are different types of networks for groups; centralised, decentralised and "all channels", and the operations or tasks complexity decides which type of networks are being used. If the operations or tasks are complex the decentralised type of network is more effective with fewer errors. For organisations networks are built with a focus on two things; nodes where sender

and receiver meet, and relations which is the chosen communication channel, as well as coding and decoding of messages. Analysing networks helps us understand that with a strong cooperation between activities the better coordination, and centralised networks are controlled hierarchically. For managers the importance of communication is for management, coordination and control. It is essential that

Communication as an interaction between persons to express or exchange information to share thoughts and ideas is divided into verbal and non-verbal communication. In verbal communication barriers arises between persons if the language in the conversation process is different.

2.0 Methodology

"Methodology is a set of principles and ideas that inform the design of a research study" (Birks & Mills 2011:4)

This empirical research paper is meant to introduce me to new knowledge in my area of interest, in a way suiting my research question as well as my personality. To accomplish this I had to look for the correct research methodology. My chosen methodology intended to assist me in collecting data, and to help me answer my research question with relevance, validity and reliability. Theoretically a focus on collecting empirical data systematically, processing the data, and analysing and interpreting it within a theoretical framework according to my research question would help me accomplish this. Being who I am, an entrepreneurial spirit, the thought of doing things in a specified order terrified me. I am drawn towards the fluid process which is not pre-planned with great caution, not a rigid and structured research format. I am fascinated by the evolving and dynamic nature of what surfaces as I move along. While looking into different approaches I grew fascinated to Grounded Theory, however I have not possessed the amount of time necessary to do a thorough grounded theory study, my research study it therefore a "modified grounded theory" to find themes that can provide insight to the phenomena explored in my study (Mills & Birks 2011). Throughout this chapter I will explain my work in the research process and the choices I have made.

2.1 Research philosophy

The early grounded theorist Glaser never adopted the relevance of any philosophical or disciplinary position in his research. He firmly believed that adopting such a perspective would reduce the broader potential of grounded theory. As there are methodological gaps in texts written by first-generation grounded theorists, students using this approach needed to figure out what "was going on" ontologically and epistemologically on their own, in order to plan and execute a study to pass the examination.

As my research is interpretive and guided by my set of beliefs and feelings about the world, as well as my thought about how the world should be understood and studied, it is useful to myself, and those who read this paper, to understand my personal philosophical position. It is time to "Clear the space for the writing voice, hacking away at the others with a machete" (Lamott, 1994).

There are two main approaches to research; quantitative and qualitative. My area of study is an area of little knowledge, it is difficult to form a clear hypothesis, and my intention is to uncover the content of the chosen phenomenon to gain a better understanding of it. I aim towards openness and nuances, and I have tried to have no preconceptions of what answers the respondents give. Since I have chosen an exploratory research design and I am performing N-studies where my data collecting methods are interviews, document studies and observations in the field my chosen approach to the research is qualitative.

Looking at my hypothesis and questions, my choice of data eliciting and analysis (Bauer and Gaskell 200: 3-17), as well as the fact that I am using a grounded theory for my study, there is no other choice of method than the qualitative methods.

The nature of data is collected is essential when choosing the correct approach to the study. A quantitative research demands a relatively clear hypothesis to describe cause and effects of a phenomenon, and the existence of "the law of nature". The aim is often a large number of entities and width, and the objects analysed are numbers, not words. The data collected can be analysed through statistical software programs, and the hypothesis is tested through a hypothetic-deductive method. The quantitative method is not applicable in my study. Since I do not have access to substantial knowledge about the phenomenon to create a clear hypothesis the qualitative approach is more likely to be relevant for this study.

To approach a research study our understanding of reality is essential. Ontology is "the study of being" (Blaikie 1993), describing our view on reality, being an objective reality that really exists or a subjective reality in our minds. Views on the reality can be divided into a postivistic view, which focus on science, on the existence of general rules in social systems, as in natural sciences. Another view specifies that it is impossible to transfer the laws of natural science to social systems. People are living, they react to new knowledge and have the ability to change their behaviour. "dead things from natural science do not." Theoretically "Deeply embedded ontological assumptions" needs to be identified and considered if one is to be able to keep an open mind during a survey, to minimise the affect these assumptions have on reality. "The study of being" is followed by the "study of knowledge" referred to as Epistemology. Ontology and Epistemology are in an interdependent relationship where they inform, and depend upon each other.

2.1.1 Positivism versus Hermeneutic approach

The positivistic approach focus on natural science and the testing of hypothesis developed from theory that already exists. Explanation of causes and effect, generalising theory, predicting outcomes, objectivity along with using quantitative methods for data collection and statistical analysis are some of the basics in this view. To be able to verify or reject hypothesis in order to achieve empirical evidence is essential in the positivistic philosophy. (Johnsen & Stokvik 2014, Jacobsen 2005)

My thesis is however is a research where I go out into the filed with an open mind and gather as much information as possible before I return to my study to organise the data collected. I am moving from empirical knowledge towards theory, the so called *inductive* approach hand grounded theory. My research focus on the complex interaction between groups of people, and between people and organisations, where I have tried to study what people say and do, and the cultural-context they act in. Being in a close relation with my interviewees, their developing trust in me as a researcher has been essential, to gather true information through conversations. True information in this case is defined as when my respondents tell me things they normally would not tell. Based on this I would argue that my approach would lean more towards the Hermeneutic school than positivism. (Johnsen & Stokvik 2014, Jacobsen 2005) Grounded theory methods are referred to as inductive in that they are a process of building up theory from data itself (Birks/ Mills 2011:11). From the time limit at my disposal I realise that I will not be able to create any theory. However, the methods used when forming grounded theory apply to my research question and research philosophy, hence I argue that it is possible to use grounded theory elements in my research to present my work process, cases and discussion to the public in a logic and understandable way. Search and Rescue in general is a new area of research and thus difficult to pinpoint. Grounded theory allows me to conduct the research with an approach where my subjective opinions are of value. I can, when analysing my respondent's answers, write memos of my thoughts which I can include in the discussion (Birks & Mills 2011).

2.2 Research design

The choice of research design depends upon the research question. Descriptive and causal designs are the most common (Jacobsen 2005). The descriptive design would answer the questions "what", "who", "how" and "why" with the purpose of describing characteristics of the data collected., often with qualitative methods .The causal design investigates the relations between cause and effect, by the use of quantitative methods.

Since I knew very little about the area of my study, and I needed to explore the subject I chose an exploratory design.

2.2.1 Choice of Method

Methods are practical procedures used to generate and analyse data.

Throughout my work I have developed a fascination for Grounded Theory. I realise, however, that I cannot create any theory by the time at my hand, but I believe I can use some of the elements in Grounded Theory to discover themes used in the discussion. to the public in a logic and understandable way. Search and Rescue in general is a new area of research and thus difficult to pinpoint. Grounded theory allows me to conduct the research with an approach where also my subjective opinions are of value. I can, when analysing my respondent's answers, write memos of my thoughts which I can include in the answers I find or do not find.

Grounded theory methods are referred to as inductive in that they are a process of building up theory from data itself. (Birks/ Mills 2011:11) Grounded theory was developed by Barry Glaser and Anselm Strauss. The theory was derived from a study to examine the experience of dying which Strauss conducted in 1961. Strauss invited Glaser into the research team. In 1967 they presented "*Awarness of dying*" and at the same time published "*The discovery of grounded theory*". (Birks/ Mills 2011)

There are two distinct methods for research studies: Quantitative method and Qualitative method.

Quantitative method

Quantitative method is chosen when we have a relatively clear hypothesis, when we would like to predict what will happen if *a* happens, *b* will also happen. The aim is often width and a large number of entities. Normally during quantitative research focus is on analysing numbers. Data is easily processed in software programs, there is low cost, we find a clearer start and end to the study, and we will reach more respondents. The external validity is high, as well as we find larger variations under different conditions. The pure quantitative survey consists of questionnaires were the answers are already coded in numbers.

Qualitative method

Since I want to explore Search and Rescue, to establish an understanding beyond describing what is important in Search and Rescue, and to try to clarify problems within SAR if there are any, I argue that the qualitative method is the better in this case. There are few limitations to the answers the respondent presents. The data have not been coded before the survey starts, the researcher often does not know what result the answers will give in the end. Often the qualitative methods will give us the real situation. Trust between the researcher and the respondent/ informant is crucial when using qualitative methods, as my aim is to find the "true" answers, the underlying feelings and meanings which are not expressed lightly. The qualitative survey is flexible, we have the possibility to change our hypothesis during our study. The process is interactive. (Jacobsen 2005: 129-168). The survey however has a high resource demand, it is complex, and the data are unstructured. Being close to the respondent/ informant may cause trouble if you as a researcher get too attached and lose your ability for critical reflection

2.3 Data collection and the research process

"Grounded theory is indicated when: little is known about the study, the generation of theory with explanatory power is a desired outcome, and an inherent process is imbedded in the research situation that is likely to be explicated by grounded theory methods." (Birks/ Mills p 16)

Not having a proper research question in the beginning of my study was a little confusing, until I studied the grounded theory approach to a research. As in this approach, in my study a broad research question were stated, which was narrowed down as the research process continued. I was also required to produce a formal proposal which included a statement of my research. From this on, I entered the field of study with an open mind, and with confidence that the relevance of my problem would come from those who it was significant for. The qualitative methods chosen through the process was individual interviews with respondents, internet studies, document studies, and triangulate observations with interviews, as well as observations during three different field studies. These sources can be used alone or in combination. (Corbin & Strauss 2008)

In a qualitative research data are divided into primary and secondary data. Primary data are the data collected by the researcher for my specific study, and secondary data are data collected by others for other purposes. An important assertion is the validity and reliability of the data collected. Since my study is complex, and I wanted to explore as much as possible I chose to interview persons individually as well as observe communication and coordination under certain conditions. I had difficulties reaching Russian respondents, however in the end I was able to conduct two face-to-face interviews, and one interview via e-mail. In addition to this I conducted document research to supply the Russian views.

The process has been very interesting and rewarding. I started in September 2013 with a preliminary research by participating at the Barents Rescue exercise as an observer. From there I moved on to attending the Arctic Frontiers conference in Tromsø 2014, where I listened to numerous very interesting lectures about resources, technology, laws and regulations, and worst case scenarios for incidents in the High North. The next natural step was conducting interviews based on my chosen population. The document search led me to two incidents in the Barents Sea involving cross-cultural co-operation, the Maxim Gorkij

Grounding in 1989 and the Kursk submarine accident in 2000. Both these incidents are also relevant to why the exercise Barents Rescue was established.

Interviews

Interviews can be divided into group interviews and individual interviews. The individual interview chosen has been chosen for this research since I have relatively few respondents and I am interested in knowing how each respondent interpret the phenomena in the study. I argue that a face-to-face interview is more relevant in this research as the phenomena can reveal sensitive information, if this is the case it is easier for the interviewer to pick it up when the possibility to observe the respondent is present. In this particular study where I seek to reveal hidden infotmation the unstructured interviews, which are more data dense, are relevant. Even when conducting an unstructured interview I have to keep some kind of control to be able to influence the course of the interview, I chose to bring an interview guide consisting of certain topics I wanted to illuminate. The number of interviews conducted in this research is thirteen. Four of which is triangulated with observations through filed studies. One has been conducted via e-mail, and one was conducted by boarding a trawler by pilot ladder in the North-East Barents Sea. The last one conducts some uncertainty about the legality of my being on board the trawler, as it is Russian territory and I did not have a Russian visa. The Coast Guard, however, introduced me and asked if it was ok that I asked questions about Search and Rescue, and as long as they were positive to me I assume it is valid. Prior to each interview I informed about my research study, and gathered an oral consent from my respondents to use their information in my paper. During certain parts of the interviews a few stories was told to me in confidentiality. These stories are kept out of the research study.

Norwegian Defence Research Establishment

My first approach was to study cross-cultural Russian-Norwegian relations. As such my first visit was at the Norwegian Defence Research Establishment, as well to study cultural literature embedded in my curriculum. My first interview was respondent and my focus was Norwegian relations to Russia, vice versa, as well as hearing his thoughts on the Kursk affair, which he has written a paper on. Even though my interviewee mainly study the security between our two countries, he is also very interested in SAR in the High North. My interviwee pointed out that there are two types of security in the Arctic: *"soft security"* which resembles SAR and *"hard security"* which is defending our territorial waters militarily. With the cultural dimension in mind I learned that it was a credible assumption to believe that the cultural aspect of corruption could be transferred from the business world to the world of search and rescue. According to my interviewee, the High North is very important to Russia symbolically on three geopolitical levels; 1) Economically, 2) Military, 3) The cultural dimension as a symbol of heroism during expeditions and research (Norwegian Defence Research Establishment, interview 2014). Very often in grounded theory studies one interviewee points the researcher in the direction of new possible areas to collect data, as was the case here, when this interviewee pointed me in the direction of literature on the Kursk incident.

JRCC - NN Bodø

A central and natural source of data for SAR is JRCC – NN in Bodø, which I approached next. JRCC- NN in Bodø set up three interviewees at their offices in Bodø, scheduled time for the interviews was 30 minutes each. Arriving at JRCC – NN Bodø I was invited to join the morning coffee meeting where daily tasks were discussed. I visited the tactical operational room and observed their work for a while. My first interview at JRCC – NN Bodø lasted 2 hours, not 30 minutes as initially estimated. Fortunately I had estimated more time than JRCC – NN Bodø, as I know from experience that I am an interesting conversationalist, and establishing trust and getting into the interesting discussions take time. The interview was conducted in a relaxing lounge area. The interview was open. After giving my opening remark I let my interviewee talk. I did however reach out and help my respondent to get back on track when the stories went wide. Trust between my interviewee and I was developed after around 30-40 minutes, this was also the point where it was getting interesting. My second and third interview took place in the operational room, while the respondents were working. They were a little reluctant at first, but once trust was established the interesting stories were told.

Maritime patrol aircrafts, P-3 Orion Andøya Airport

P-3 Orion at Andøya Air Force base is not the first resource that comes in mind regarding SAR. According to themselves they have capabilities no other resource has.

Corresponding with them via e-mail at first, and receiving a tip I decided that they were an interesting respondent to interview face-to-face. Interestingly they showed me the reach of their aircrafts, as well as their surprising ability to be of assistance in SAR by deploying equipment to distressed persons. The Orion plane is the only craft with an ability to reach Norway's entire Search and Rescue Region. Their flight time to the North Pole is normally 4 hours one way. The crew can drop a so called SKAD – Survival Kit Air Dropable – containing two life-rafts, from their aircraft at a height of 60 meters above sea level. The Orion, with all its technical equipment, can also conduct search for distressed persons at sea over a great distance at a speed no one else can compete with, and they can act as an on-scene coordinator during Mass Rescue Operations. Presently they are available for SAR operations when they are not conducting other operations for the Armed Forces. When Orion assisst in rescue operation they are scrambled by JRCC – NN Bodø, RSC's or the Armed Forces Operational Headquarters. To be able to take a more active part in SAR they need additional funding from the Justice Department, which has the overall responsibility for SAR in the Norwegian SRR. Based on the information about the capabilities of the Orion I invited them to take part in "Exercise Vengsøy" in October to demonstrate the use of SKAD.

Norwegian Coast Guard

As the Norwegian Coast Guard, hereafter referred to as NCG, plays a significant role in Search and Rescue both in the Barents Sea, and along our coast, as well as the fact that they have encountered numerous situations with both Russian and Norwegian vessels, I found it relevant in this particular study to explore as much as possible with regards to their missions. I conducted three interviews with former and existing crew, as well as interviewing crewmembers on the CGV I cruised the Barents Sea with for three weeks. Part of the decision to go on this cruise was to personally feel how desolate the area is, to feel what constant bad weather and 4-6 meter waves (the climate) do to you physically and psychologically, and to take a swim at Bjørnøya to feel the temperature in the water. The latter was not pre-planned. The NCG attended exercise Barents Rescue 2013 which is my case study. The comments from NCG on exercise Barents Rescue 2013 will be further elaborated in the next chapter.

County Governor of Troms staff member

The Troms County Governor's office was a very clear interviewee as they were responsible for conducting the exercise Barents Rescue 2013, as well as they organise preparedness plans for both land based and maritime SAR in the region. I conducted a face-to-face interview which revealed many new points on cross-cultural co-operation, as well as local communication between JRCC – NN Bodø and RSC Tromsø and RSC Tromsø and the SRUs present at the scene.

Observation field studies triangulated with interviews

To be able to use every part of myself to experience and understand the phenomenon of Search and Rescue, as well as understand the challenges in my area for the study, the Barents Sea, I decided to conduct an exercise of a ship grounding and apply for field work positions with the Norwegian Coast Guard, and the Air Force 330squadron "Sea King" Rescue helicopter. At the same time I conducted face-to.face interviews with the crews on the CGV and "Sea King". Regarding the exercise I was merely observing the tactical operations and leading the exercise. As Patton (2002:302) states: "Creative insights come from being directly involved in the setting being studied" (Corbin & Strauss 2008).

Combining field work with questions was very fruitful. Nonverbal behaviour is easily misinterpreted, when I combined it with asking questions about the behaviour I found out what the behaviour meant. This is particularly important in cross-cultural relationships, as I discovered when I tried to ask the crew on a Russian trawler about the military rescue resources in Russia, and the possibility to receive help from the Northern Fleet during an incident. The Russians became very quiet and had to go to work. Important to the observation as well as interview is the guarantee of anonymity and confidentiality. I have chosen to simply use the general term of interviewee or respondent when referring to the participants of this research study.

Apart from the face-to-face interviews I conducted with the NCG crew and crew at a Russian trawler, the cruise by itself made me feel what it is like to live for weeks in a desolate area with constant swells and waves pounding at the hull of the ship. My experiences went from feeling the adrenaline through my body as we took refuge behind the "Hoop" during bad weather, and we had an incident with our anchor, to cruising away into the distance with the man-over-board boat until we could hardly see the CGV, and the adrenaline rush of boarding a Russian trawler by jumping from the same MOB boat to a pilot ladder in swells and climbing on board knowing you had to go back the same way. I experienced to which extent the NCGVs are a safety net to both Russians and Norwegians in the area. And as such I would argue that this is observation according to Patton's (2002) definition: "Creative fieldwork means using every part of oneself to experience and understand what is happening. Creative insights come from being involved in the setting being studied".

The Sea King helicopters stationed in Bodø and Lakselv are presently the only Rescue Crafts solely serving the purpose of SAR in from air for the time being. In the areas where they are stationed they are also the fastest resource available, and they carry a doctor and a certified rescuer on board. Having the chance to observe the crew for three days was very interesting. During this time we trained on pick-up from a life raft, tactical night-flying, and search for a distressed person in the sea at night. Observing them I discovered the meaning of efficiency during SAR operations. There was not much hesitation during an operation which resulted in fast evacuation from the life raft and finding the distressed person in the water in the matter of minutes after arriving in site.

Document study

This form for secondary data were written by other authors for the purpose of illuminating two major incidents of search and rescue assistance. One of which was very successful despite the challenges the rescuers faced, the other was unsuccessful and it is not clear what could have turned the table. The data gathered are words, sentences and stories, valid for both primary research and secondary research. Descriptions of what central persons actually did during these two accidents is interesting for this research, as it potentially describes acts I would otherwise never have access to. It was very important to me to have the ability to choose the best documents with the highest reliability, as such I decided to study the novel suggested to me by my asset at the Norwegian Defence Research Establishment for the study of Kursk and the book written on the Maxim Gorkij incident. I looked into newspaper articles as well, and I found that the articles had a hint of "scandal" involving the

Russian crew on board the Maxim Gorkj, which was quite interesting as it was demented in the book by Norwegian personnel present during the rescue operation. For BR13 I studied documents and reports connected to the exercise, as well as answered questionnaires from the Russian delegation.

2.4 Further work

This is a qualitative study where I have interviewed persons face-to-face and via e-mail, as well as doing observational field work, and document analysis. The information gathered is difficult to analyse statistically as don in a quantitative analysis. I have looked at the quotas and sentences in my interviews, as well as drawn upon my experiences from the observational fieldwork, and studied document to search for insight and knowledge which could help me perform a reliable and valid discussion. I have conducted this research study with integrity, and I have tried to report my work as precisely as possible, and to the extent of my ability. My research study ends in a discussion of my empirical knowledge according to my theoretical framework.

3.0Empirical chapter and discussion

3.1 Historical SAR events leading to the establishment of Barents Rescue The development of Search and Rescue in the High North is regarded highly in many worldwide organisations agenda. One important sign for this, from my view, is the very recent adoption of the Polarcode, the International Code for ships Operating in Polar Waters, a historic milestone for the IMO organisation's work to protect seafarers in the harsh environment in the Arctic and Antarctica (www.imo.org). In recent years, in the Barents Euro Arctic Region (BEARC), the establishment and continuous development of exercise Barents Rescue seems to be a sign of how important we find cross-cultural co-operation in SAR within the High North. There is however, some persons in the system that find the exercise too big, and without relevance. This is an important view and it will be brought up for discussion in the next chapter, in addition to the discussion of how cross-cultural cooperation and communication works in reality. In this chapter I argue that three major incidents in Arctic waters have had an impact on the development of MSAR in the High North, thus culminating regionally in establishing the BEARC organisation and exercise Barents Rescue.

The Titanic

The well-known and one of the worst maritime disasters in modern times, the R.M.S Titanic sideswiping an iceberg on April 14, 1912 can be seen as the reason for the first conscious act taken to prevent maritime disasters. The Titanic, which at the time was considered unsinkable, sank in less than 3 hours on her maiden voyage. More than 2200 passengers and crew were aboard the cruise ship this winter night, only 705 survived the cold water and harsh climate in the Arctic Sea. According to the ship builder Titanic should have stayed afloat for at least two days, this would have given nearby vessels enough time to assist in the rescue of the passengers (Gannon, 1995). On the evening of April 12 however the encounter between Titanic and the ice-berg damaged the ship's hull critically. Six of the sixteen watertight compartments were flooded and caused "the largest ship ever built to sink in a fraction of the time estimated for her worst possible accident at sea." (Vicki Bassett)¹². According to Bassett the stars were aligned to cause three causes of failures critical to the material of Titanic to appear at the same time. Low temperature, high impact loading and high sulphur content were factors critical to the ship's hull. "On the night of the Titanic disaster, each of these three factors was present: The water temperature was below freezing, the Titanic was travelling at a high speed on impact with the iceberg, and the hull steel contained high levels of sulphur "(Vicki Bassett, Article. 1998). The IMO organisation responded to this disaster by establishing the first version of the SOLAS Convention adopted in 1914¹³. Establishing the SOLAS convention was probably a direct consequence of the tragic disaster in 1912. The reason to assume this is the text of article 8-10 in the text of the original document of January 20, 1914, describing initial actions of masters of ships when ice-bergs are spotted. It is even stated that "the transmission of messages respecting ice and derelicts is free of costs to the ships concerned." Article 8. Article 10: "When ice is reported on, or near, his course, every master of every ship is bound to proceed at night at moderate speed, or to alter his course so as to go well clear of the danger zone."¹⁴

¹² Undergraduate Engineering Degree. Article. Causes and Effects of the Rapid Sinking of the Titanic <u>http://writing.engr.psu.edu/uer/bassett.html</u>

¹³ Described in the theoretical chapter under Conventions, Laws, Regulations and agreements.

¹⁴ The original text of the SOLAS convention:

http://www.imo.org/KnowledgeCentre/ReferencesAndArchives/HistoryofSOLAS/Documents/SOLAS%201914.pdf

The Maxim Gorkij

On June 19, 1989 we could easily have experienced the second "Titanic disaster". The Russian cruise ship TS "Maxim Gorkij" collided with drifting sea ice, on her way from Iceland to the Magdalen fjord in Svalbard. The accident happened in a remote area in the Icefjord. All passengers and crew were evacuated, and the vessel was salvaged due to quick responses from Norwegian Rescue services in the area. However, pure coincidence and luck put both the CGV Senja and the Air Force's 330sq "Sea King" helicopter from Bodø in the same area. In the initial alert from the MG the Russian Captain merely stated that they needed assistance, and the number of passengers and crew members. CGV Senja headed for their position ready to perform assistance, and planned according to the information they received. When CGV Senja arrived at the scene they very quickly understood that the situation was far worse than what the Russian Captain had stated whilst communicating via short range radio with CGV Senja. MG had reported a leakage in the hull, but a stabile situation. In reality people had been evacuated from MG in lifeboats. Some of the lifeboats had been abandoned and people were standing on rotten ice, in the middle of the ocean, in swells of 3-4meters. CGV Senja realised that this was a rescue operation, to get people on board the Coast Guard vessel before it turned into a nightmare. The "Sea King" on its way to Svalbard, and the sea king stationed on the mainland immediately responded to the mayday, and arriving at the scene started to evacuate people from the ice. The helicopters landed on deck of CGV Senja to disembark people and refuel. This is normally prohibited however CGV Senja had trained to take down helicopters just in case. Everyone was evacuated to CGV Senja, which with a normal passenger capacity of some 100 persons, now hosted 900 persons. According to the captain of CGV Senja their SAR training, as well as the training to take down the helicopters, were the success factors in this Mass Rescue Operation.

The submersible Kursk

Search and Rescue very often involve military resources in cooperation with civilian resources. Due to this I, and to look at the culture differences, and the international communication process between Russia and Norway I chose to study the sinking of the Russian Submersible "Kursk". There are numeral papers on the «Kursk» disaster, I know, but this disaster has made such an impression on me, and it is very relevant to Russia's involvement in the Barents Rescue, that I cannot oversee it when I am working on a paper on by Robert Moore and Kristian Atland's paper on the Kursk and the Priz.

On Saturday August 12, 2000 in the Southern Barents Sea the Northern Fleet exercise went according to plan except for some technical problems and weapons failures. The submarines' task was to fire torpedoes. The Kursk sent her signal "We are ready for torpedo firing" (Moore p 40) at 08.51am. As planned this was to be the final signal until the torpedo firing was over. At exactly 11.28:27 the torpedo supposed to be launched from Kursk at periscope depth exploded in a massive fireball. No emergency communication was sent from the Kursk, the emergency buoy failed to function. The explosion was registered in Karasjok at 11.30 and relayed to the Norwegian Seismic Array in Oslo. The institute's scientific director was puzzled by the seismic activity. The rest of the Northern Fleet in the Barents Sea felt the shivers from the blasts going through their vessels, some more than others. Like the captain on the submarine Karelias assessment was that the "Fleet admirals would not thank him for radioing in an alarmist report, and Korablev certainly did not want to be blamed for unnecessary communications or for panicking over a weapons test that had nothing to do with him. There would be no prize for sending signals that could be ray her location to Americans or British submarines." Moore p 62. It is suggested that this reluctance goes back to tsarist Russia when "military officers were deterred from raising troublesome issues." Moore p 66. In the 1930s the issue was more serious, when the Red Army had their massive purges. Moreover the fate of the SAR resources of the Northern Fleet was disastrous as these were the assets easiest to cut for the admirals when funds earmarked for the Northern Fleet never reached their destination. According to the Information Booklet for exercise Barents 2009 Murmansk Russia, the tragic incident of the sinking of the Kursk submarine in 2000 was one of the happenings leading the world to look at the security for the public. The accident turned the focus towards the importance of international cooperation

Ensuring the preparedness of the world community to unite their efforts not only to confront international terrorism, but also to effectively interact while providing disaster relief in large extraordinary situations became an obvious and urgent task.

3.2 Barents Rescue

3.2.1 Early exercises

The first exercise Barents Rescue was held in 2001 in Sweden. From 2001 the exercise has been regular every other year, hosted by the countries who initially signed the agreement. Why did the Rescue cooperation and exercises start in 2001 when the Barents Euro-Arctic Council was established in 1993? Could the answer be that the event in August 2000, the "Kursk" tragedy, made Russias neighbouring countries, and Russia, realise that we need to co-operate within SAR, to learn from each other and to interact effectively across borders, despite language and cultural differences. The first exercise Barents Rescue exercise in 2001 represented a great step in the right direction. The aim of the exercises is to find the key to make military and voluntary rescue personnel work together as a team.

In 2001 the exercise was held near Boden in Sweden. The scenario was a disaster at a nuclear power station, to evacuate the population in the area and to search for and contain radioactive sources scattered over a large area. The days of training together is described as an "outstanding lesson of real interaction between military and civil specialists in efforts to rescue victims in extraordinary situations".

The 2005 exercise was held in Finnmark in Norway. The scenario was a combination of mass injuries on a cruise ship which had collided with an oil tanker, and oil spill, creating a major incident where passengers and crew members needed evacuation, and oil spill needed to be contained.

Finland hosted the exercise in 2007 in Inari municipality in Finland. The scenario was an aviation accident involving 200 injured and deceased British tourists. The aim was to train on communications, co-ordination and cooperation between the countries and rescue service abilities involved.

Russias first exercise took place in Murmansk Oblast in Russia in 2009. The scenario of the exercise was complex with multiple incidents in different areas involving a fire in an aircraft crashing into a storage of nuclear waste, a sinking ship, a forest fire and a traffic accident involving tourists and locals.

Sweden again hosted the exercise in 2011

In 1993 the Barents Euro-Arctic Region was launched among the states Denmark, Finland, Iceland, Norway, Russia, Sweden and the European Commission. The cooperation was organised in the intergovernmental Barents Euro-Arcitc Council and the interregional Barents Regional Council, to secure political stability in a region of historical military tension, and to create sustainable development. The task has been a success, creating closer contact among the people in the region, and cooperation between the military forces in the North Norway and Russia. The Working Group on Emergency and Rescue Services Co-operation, WGERS was established as a working group for rescue cooperation. The group had an aim to establish and maintain better rescue services in the North.

http://www.regjeringen.no/nb/dep/jd/tema/internasjonalt_justissamarbeid/sub/samfunnssikker het.html?id=446156

The Barents Rescue exercises focuses are in areas sparsely population, long distances, limited resources, and challenging logistics; as such an important area for cooperation across borders. The idea is that this cooperation will improve emergency and rescue operations pulling on the resources and common knowledge of the entire area, following the recommendations of International Maritime Organisations operational manual. This manual points out that joint exercises in a SRR, as opposed to training alone, share mutual benefits as lower costs, providing faster emergency response, learning to know the neighbouring cultures, getting to know each other, and aiming at a more efficient assistance. The possibility to have direct access to resources, and specialised personnel from neighbouring countries is a goal by itself (IAMSAR. Volume I-III)

The agreement in the field of Emergency Prevention, Preparedness and Response was signed on December 11, 2008 in Moscow by; Norway, Finland, Russia and Sweden: "The Joint Committee has been established in order to strengthen and expand ongoing, transboundary, emergency and rescue services co-operations at county level in order to improve the interoperability of emergency and rescue services functions in the Barents Region. Focus of the Barents Rescue co-operation is "on day-to-day basic emergency situations, such as traffic accidents, forest fires, tourism related accidents, fires in open cabins, floods and ice plugs, and industrial and chemical". (<u>http://www.beac.st</u>) As Norway's territorial waters include an area of 1 979 179 km², most of it in the defined Arctic zone, as well as sharing a border with Russia in the Barents Sea, I find it interesting that maritime SAR is not included in the focus of Barents Rescue co-operation on rescue

3.2.2 Exercise Barents Rescue 2013

The alert phase of the Nordnes mountain in Lyngen changes status and moves from orange to red. A massive rock slide is about to hit the Lyngenfjord, and create a tsunami throughout the fjord, with a wash-up at the height of 50 meters above sea level. The unstable Nordnes mountain will let go of 22 million cubic meters of rock mass. The mountain has been closely monitored since 2012 when it was raining excessively and increased the movements in the mountain. People and livestock are being forcefully evacuated on this day September 18, 2013. While the evacuation is conducted, and information is provided to media and public, there is a new alert. In connection to the evacuation there has been an accident in a road tunnel in the area. The incident require firefighting and Urban Search and Rescue (USAR). At the same time an international youth camp is held in Lyngen, the participants are teenagers from all over the world. As they registered at the youth camp their mobile phones were handed in, they have no connection to the outside world. The leaders of the camp decide that they will stay at the camp as they are too far up in the hills to be in danger from the tsunami.

Managing the rock slide and tunnel incidents is demanding. In addition to the tactical operational teams the mission commanders and local authorities prepare for additional scenarios as other damages which will follow an incident of this magnitude. Expected damages they can prepare for are loss of all essential infrastructure; roads, electric power and electronic communication. When a third alert dispatches at JRCC – NN in Bodø there is an incident at the youth camp. There has been a major explosion with several severe injuries. The Joint Rescue and Coordination Centre in Bodø, upon receiving the distress call, scramble all Search and Rescue units in the area, and send them to the area of the accident.

In September 2013 this is merely an exercise, the countries of the Barents Region training for a Mass Rescue Operation at different stages. The aims of the exercise are to improve communication, cooperation and coordination between local and regional SAR resources. Additionally the exercise is supposed to *"improve preparedness and co-operational effectiveness of civil protection, and joint emergency response, as well as developing responder network"* (Information folder BR13). The importance of exercises of this magnitude is stated by the IMO organisation in the IAMSAR Rescue manual Volume II – Appendix C.

The exercise Barents Rescue 2013 and the scenarios described above took place in Troms County in North Norway. The Nordnes mountain in Lyngen shich is threatening to shed a landslide sometime in the future is closely monitored by the Norwegian Geological Survey organisation (NGU). The rock mass of 22 million cubic meters is moving at a rate of 4-5 cm a year. At the time Norway overtook the responsibility to arrange the exercise Barentsrescue 2013, the County Governor of Troms initiated an application to hold the exercise on behalf of Troms county. The background for the application was the discovery of massive movements in the Nordnes mountain. A rock slide has been predicted for a long time, but at the time there was no plan on how to pre-empt a catastrophe once the rock slide comes. Troms County decided to benefit from the BR13 to create a common preparedness plan for the municipalities in the area and the county, by arranging the exercise. Already in October 2012 Troms County invited the mayors of the municipalities surrounding the Lyngenfjord, the local Rescue Sub Centre and local Search and Rescue Units to inform about, and create a discussion on the matter. Focus for the Preparedness County group is to take pre-emptive action.

Aims for exercise Barents rescue 2013 (BR13) was to conduct a full-scale exercise to improve cross cultural communication, cooperation and coordination between neighbouring countries. Several countries are involved in the exercise. According to the aim of this study the main focus will be on the Russian-Norwegian relation.

According to the report produced by the DSB, and research conducted for the study a summary of the objectives and related statements for BR13 follows. According to the report, questionnaires were sent to all participants, their answers are the basis for the report. Interestingly, when talking to participants of the BR13, the objectives are addressed differently. Although to fully understand the different interpretations, magnitude and challenges of such a large exercise probably requires a deeper study on a higher level. To address some of the differences, a description of the objectives, including differences between experiences and the analyses of the report from BR13 follows.

<u>Testing the agreements</u>, the aim for BR13 according to the report from DSB was to "Define, test and evaluate relevant bilateral and multilateral agreements for assistance and the applicable legal and administrative framework."

"The agreement of BEARC is challenging to effectuate because it is ministered by JRCC-NN in Bodø, the reason it is challenging is that JRCC-NN Bodø does not take pre-emptive action they take action when an incident has occurred. According to how Troms County Preparedness Council understand the cooperation there also needs to be a pre-emptive stage, as our neighbouring countries would give better assistance if they knew something was about to happen. Moreover the lesson learned from exercise Barents Rescue shows some uncertainties in the agreement. The question arises whether this is a functional operational agreement or merely a political will".

The planning process is next. According to the report the aim was: "The planning process itself as an important element in building personal networks, enhancing familiarisation between participating agencies and countries, and for improving the planning process." Taking place in the initial planning meeting in Tønsberg in August 2012 was around 70 persons from Norway, Sweden, Finland, Iceland and Russia. The armed forces in Norway participated in this first meeting only, as they did not see any aims for their resources in the exercise, according to FOH. Their participation would be assisting with rescue resources needed during the exercise, as they would in a real event. According to the report from DSB the planning process went well. Roles were coordinated and clarified, and networks established and developed, hence the objective above (Exercise Specifications manual BR13). To the initial meeting all countries sent participants which would participate actively, and had the authority to make responsible decisions necessary for their own organisations learning, as stated in the Exercise Specifications manual of BR13, except Russia. In good tradition with Russian centralised decision making culture, the Russians attending did not have authority to make decisions as to which scenarios they would participate in, what resources they could offer, or bring to the table their own goals for the exercise. Interestingly the Russians participated in all planning meetings, however according to the County Governor's office they did not contribute.

"The Russian side was not able to participate in all workshops or to send more than 2-3 people for each big planning conference so our participation in the planning process were somewhat limited.

In any case I must say that planning process for Barents Rescue exercise is quite different each time so it is difficult to compare it even between BR-2011, BR-2013 and BR-2015 for example. It is because each country has its own traditions of planning exercise and different expectations about how responsibility for planning process should be distributed between host nation and other participating countries. For example during BR-2015 planning process Finnish side more or less considers that responsibility should be more equally distributed and other countries must contribute as much efforts to planning as Finland as host nation. In our case during BR-2009 we as host nation considered it more convenient to plan as much as possible by ourselves (I must admit that it was not only because we considered it to be duty of the host country but also because it was easier for us to do it that way). Norwegian way of organizing planning process during BR-2013 was somewhere in between the above two." (EMERCOM interview. 2014)

"Again from my point of view the planning process were formal enough to be effective and informal enough to be flexible and even rather pleasant. As for the Norwegian way of planning I am not sure that it is possible to judge it using only experience from BR planning process. Although I can say that it was little bit less strict and ordered than Swedish and more strict and ordered than Finnish. Also Norwegian way of planning exercises provide more unexpected injects for the trainees (especially for the commanding personnel) than Russian one and I think this is better way for training." (EMERCOM interview. 2014)

Following the planning process was <u>co-operation between authotities</u>; "Promote cooperation between authorities in the Barents Region, as well as at the national, and international level." This is not described in the report at any level. However my interviewee focused on this in his statement as it was a key issue for Troms County's participation and arranging the BR13 to keep the exercise and role play at a local level. "For the first time in the history of the Barents Rescue exercises the lowest level, the municipalities were involved; they acted the roles they will play in the future, when the mountain comes down. In comparison, during the last exercise in Norway, in 2005, it seemed like the exercise was a "playground" for certain officials. Central persons from the Justice Department and DSB entered the arena, and took positions which they will never in take in reality, side-lining local actors."

Troms County was relentless in their decision. If the municipalities were not allowed to participate in key positions during the tactical operation Troms County would not host the event.

The field response operations cover a wide area, including both the field training exercise and the media play. These objectives are described in the report as: "Strengthen transboundary cooperation at local and regional level", and "Enhance awareness, and use of media being an important part in the crisis-management process for channelling information to the public." The field training exercise contained deploying resources into the field and a focus on the performance of operational crisis management at a lower level in the decision making hierarchy. The DISTAFF was responsible for planning the scenarios: Evacuation, Tunnel accidents and Youth camp. The analyses of the Evacuation, the tunnel accidents and the youth camp all show similarities in communication and coordination failure. According to the County Governor's staff interviewed the Russians did not show any interest in the exercise, perhaps because they did not understand how the system in Norwegian SAR is organised. However the Incident Commander from RSC Tromsø did not have any overview over Russian personnel, it seemed like the Russians wanted to keep control over their own resourc I must admit it were some communication problems both in technical terms and in terms of mutual understanding.

"At first our teams were not temporary provided with local communication equipment. Normally it is done (at least several pieces for commanding officers and rescue leaders) by host country or rescue service since it helps to maintain the integrity of combined forces without the need of complicated efforts to connect different equipment with different communication standards and frequencies. This situation lead to some problems since our personnel was only able to communicate by direct voice with other rescue teams and on-site command so it hampered effectiveness of their work. Also one of the sub-phases took place on the opposite site of the mountain from the rescue camp and our communication officer from field command unit had to place 3 persons from rescue personnel not directly involved in SAR operation (vehicle drivers) along the road with portable radios and use them as a chain speakers to communicate with our representative in the Norwegian police operative command post in Lyngen-fyord. But if this lack of communication tools was planned as an additional exercise element simulating real possible situation than it was a good idea since it could be valuable experience for trainees (it was not so valuable for our team since they already had similar problems in real situations but it could be valuable for someone else).

Also some problems occurred with on-site communication and coordination. It seems that police officers were not fully ready to command and coordinate large rescue operations with international participation (and maybe any large rescue operations at all). Our rescuers reported that in some cases on-site command officers from police were not sure what to do with all this force they should command. In some cases our personnel had to revert to independent actions because of absence of any orders. In one case on-site commanding officer was actively avoiding our personnel then they were trying to get new orders from him after their first task was quickly accomplished." (EMERCOM interview, 2014)

"Immediately after the some exercise phases our rescue personnel characterized Norwegian on-site rescue leaders (mostly police officers) as inexperienced, unready and unable to organize large-scale on-site coordination and command. As for the cooperation with the Norwegian rescue and firefighting personnel our rescuers mentioned it was sufficient but not perfect. I suppose it is due to some difference in a way of training and conducting of rescue operations between the professional and voluntary units and also due to difference between Murmansk and Tromso region in terms of frequency and severity of emergencies. Local fire and rescue teams in Northern Norway are placed in the areas there serious emergencies are rarer and lower in scale comparing to the Murmansk area. Our rescuers normally try to conduct rescue operations as fast and efficient as possible since there are not a small chance that new problem could arise very soon and then again new one. That's why our rescuers percept Norwegian actions as little bit relaxed and slow.

On the other hand our rescuers mentioned the much better mutual understanding and practical cooperation with the Swedish SAR team. But I think the main reason of this better cooperation was the fact that it was the same Swedish unit from Norbotten our rescuers were closely cooperating during the BR-2011 exercise in Sweden. So they had mutual experience of professional and personal cooperation which was a big help." (EMERCOM interview. 2014)

"There are big differences in coordination of big exercises in Norway and Russia. It is because of different views on the large exercises itself. From Norwegian point of view large exercises are still training of abilities but from Russian point of view they are demonstration of abilities.

In Russian way of conducting large exercise they are closer to large performances than to actual exercises. Their main aim and objective is to demonstrate skills and abilities of the different services for the general population and senior officials. So serious efforts are put to ensure that demonstration will be visually appealing and without any unexpected problems. So large exercise in our case is more like big show with predetermined scenario (minor tweaks and improvisations are possible but the main script is quite strict). It is even not unheard of conducting an almost complete rehearsal of the exercise couple of days before the main event." (EMERCOM interview. 2014)

<u>Host Nation Support</u> (HNS) was at the attention of an exercise for the first time in Norway. The aim for BR13 was; "Improve procedures and practical activities for requesting, sending and receiving assets". HNS is a support system a stricken country needs to have operating to efficiently receive and deploy international resources. The HNS is an important factor for efficient border crossing. During BR13 an assigned liaison from Norway assisted in the Russian border crossing. According the BR13 report the border crossing took place "efficiently and without major issues." However it is worth noticing that there are improvements to be made to conduct a better HNS service. The experience of bordercrossing for a Norwegian group during Russia's exercise Barentsrescue 2009, on the other hand, shows us that it seems fair to assume that the baggage from the Soviet mistrust and suspicion still serves as a hindrance, or slight problem, when crossing the Norway-Russian border into Russia.

"Arriving at the border control on our way to Murmansk to take part in exercise Barentsrescue 2009 (BR09), EMERCOM was waiting for us. Their intentions were good, as they wanted to meet and greet, as well as make sure the border crossing went smoothly. However, when searching on of our vehicles they found a couple of gun shells. This started a massive investigation and interrogation of our driver as he was responsible for the vehicle. Every time he was released from interrogation, and he was on the way towards the car he was recollected and had to answer the questions over again. For the rest of us it was hilarious, we could not stop laughing. What we did not understand was; the Russians felt we were making fun of them as we were laughing, to them our fun was humiliating. They would not stop the interrogations until we stopped laughing. Our driver eventually saw the connection, and told us to stop laughing if we wanted to continue to Murmansk. We did and our papers were controlled, stamped and we could continue. During this sequence, the case rose to political level. A political storm was arising. Diplomatic measures had to be taken, to solve the matter. In this particular case EMERCOM lost interest in us, they did not search our bags and equipment, they did not even check for weapons, their focus was entirely on the gun shells. For us there was no logic in their actions. We do admit though, that we screwed up.

It is important to notice that this study, at this point, do not have stories from Russian informants. And as such it is difficult to see the reality.

And lastly, the <u>alarm system</u> where the aim for BR13 according to the DSB report was: "*Test* national and international warning and alarm routines as stated or indicated in relevant agreements."

"Presently we are taking pre-emptive measures before the incident happens. When the rock slide comes there will be "rings in the water", where the innermost ring is the Incident commander and the outermost ring is the Preparedness Council of the County, the mayors of the municipalities, logistics and so on which are supposed to keep the society going after the incident. The Preparedness Council of Troms County looked at possible ways to improve cooperation and distribution of information when a predicted incident happens, to ensure everyone received the same information. Establishing an operational centre in the area early was one solution. Theoretically this worked, however when it was operationalised it was challenging, because of disagreement of where to establish this centre, power-structures and individual positioning. This thought is not interesting for either the Justice Department, JRCC-NN in Bodø, or RSC in Tromsø." (Toms County staff interview. 2014)

4.0 Discussion

People do not always have the same view of how the world, the reality works. Our understanding of the world and reality depends on our cultural values, our religion, our feelings, and our national societal norms and values ((Kalnes. Austvik, Heidrun, Røhr. 2011). To understand and acknowledge the future Search and Rescue system, I argue that it is important to reach an understanding of our cooperative partners culture, and emphasise the importance of communication, not only internationally, but also nationally as we see in this research study. Search and Rescue is a complicated phenomenon of interaction between a number of culturally different groups. I will make an attempt to shed some light over our challenges in correlation to the theoretical foundation for Search and Rescue, culture and communication, and the reality as described in my empirical chapter, in the following discussion. I have chosen to discuss three levels within each theoretical view in my paper: management (laws, agreements and regulations) and planning, tactical operations, and my new discovery Host Nation Support. Co-ordination is a very important issue, however my argument is that co-ordination is a very important and essential part of all levels, and whether the co-ordination is successful or not depends on how well the actors know the theoretical structures of search and rescue, culture and communication.

4.1 Search and Rescue

Search and Rescue is the common designator for a massive system, and I would like to argue that all levels are somewhat spun into each other at some point.

Political framework and management planning

Planning is one of the responsibilities for management on all levels, the planning process also needs to be conducted according to the political framework within SAR such as laws, regulations and agreements which are considered the foundation for the responsibility of coastal states to establish SAR systems.

Region, as we are legally responsible to do as a coastal state, and how to conduct training exercises. On one side we find the IAMSAR manuals from the International maritime organisation with their particular description of Mass Rescue Operations (MROs) exercises in volume II – appendix C, on the other side is the Barents Euro-Arctic Regions joint manual for use in emergency situations which, as I understand it, has been the foundation for exercise Barents Rescue.

All SAR Regions have plans and regulations of how to handle incidents in their regions, and who will be responsible to manage the operations. During BR13 it was Joint Rescue Coordination Centre – North Norway in Bodø (JRCC – NN) who had the responsibility to coordinate and keep the overview on the overall picture. JRCC – NN delegated local authority to Rescue Sub Centre (RSC) Tromsø for co-ordinating locally. According to my interviews most participants were dissatisfied with management at this level, and it seems this has something to do about communication as we will discuss below

As we see above in the description of the planning process of exercise Barents Rescue 2013 (BR13) there are some inadequacies. Based on the official report from DSB "the planning process went well. Roles were coordinated and clarified, and networks established and developed, hence the objective above (Exercise Specifications manual BR13)" However when looking at the information gathered from the Norwegian side through interviews it is reason to believe that the Norwegian planning group was not very good at including the Russians hence the different way in conducting the planning. With regard to the Russian behaviour during the meetings Norwegian planners described it as it looked like the Russians were more interested in gathering information than participate actively in the planning process. Also they did not bring decision makers to the planning meetings which made it difficult for the Russians to be included. From the Russian perspective the planning process to be formal enough to be effective and informal enough to be flexible as well as pleasant.

Tactical operations exercise

According to SAR theory tactical operations demand several different tasks simultaneously. Co-ordination, communication, first-aid, evacuation, getting an overview of the situation, and answer questions from media are some factors which makes this a demanding and challenging situation. BR13 had several different scenarios, which in theory was very good since as many resources as possible would have a chance to practice on their specific aims. Interestingly several respondents replied to the multitude of scenarios as confusing, and clearly too demanding for the RSC Tromsø to deal with.

The level of information management is crucial during crises. There is a need for a continuous overview of the situation at all levels, by all resources participating, as well as to have a joint understanding of the situation to be able to coordinate actions and decisions. A need for collecting, analysing, and distribute large amounts for information of the situation is important.

According to the BR13 report on the evacuation scenario, there was limited coordination across municipalities, counties, and internally between agencies failed.

During the tactical operations in BR13 on one side the Norwegians had a "feeling" that the Russians wanted to keep the control and overview of their resources to themselves. The Russians did not seem to have any interest in co-operating with other countries tactical resources. As the Russians did not have any goals for exercise for their own organisation, they had a somewhat "Free-role" during the exercise. They were not good at presenting their resources to the Incident Commander. On the other hand the Russian view of the tactical operations emphasises that there is inexperience and problems with the communication and co-ordination especially from RSC Tromsø. My source from EMERCOM expressed better co-operation with the Swedish Rescue Unit, he did admit that this could be due to the fact that they had prior experience of co-operation.

Coordination of actions and resources seemed to work well on most levels. There was however some problems between the armed forces and the local RSC. The report does not state any information on the coordination of other resources such as Redningsskøyta and P-3C MPA. The Norwegian Cost Guard reported failed external coordination due to lack of communication between the RSC and the Coast Guard.

There are big differences in coordination of big exercises in Norway and Russia. It is because of different views on the large exercises itself. From Norwegian point of view large exercises are still "*training of abilities*" but from Russian point of view they are "*demonstration of abilities*." This was also referred to as a difference noted by the Governor of Troms County staff member. According to the source in Norway we have a "*learning organization*", the Russian organization lean more towards "*Taylorism*"

4.2 Culture

There are several cultural views describing person's actions and beliefs about how the world should be. Among these different views I have chosen Hofstede's Power Distance Index describing the four different ways of cultural differences between countries; These are Power distance, Collectivism, the Need of Avoiding Uncertainty and Masculinity versus Femininity.

Political framework and management planning

It seems like both Russians and Norwegian acknowledge the bilateral and multilateral agreements founding the co-operation in the exercise Barents Rescue. The only mismatch spoken of is the organizing of the Norwegian system from Norwegian participants. This however is only mentioned by one of my sources, even though I consider him a very reliable according to his general knowledge, the validity may or may not be good.

The planning process is different from Norway and Russia. In Russia for the exercise Barents Rescue 2009 the Russians decided to plan as much as they could themselves. This may be due to their way of co-ordinating and executing the actual exercise, as opposed to the Norwegian way of executing the exercise. The difference of how to execute the exercise I will argue lies within Hofstede's *"Need of avoiding Uncertainty"*, where Russian culture tend to lean toward High Uncertainty avoidance meaning that people prefer predictable situations, and have low tolerance for ambiguity, they prefer clear instructions to do a job. I also see a connection for the high score for Russians on the variable *"Masculinity"* in which cultures people value achievement and competitiveness, as they like to show off. The Russians often rehearse before large exercises to make sure everything will be perfect. A Norwegian source confirmed this, as he observed the exercise Barents Rescue 2009 in Russia and said that he found it very strange that the Russian units were lined up, they received an order, ran out after one another, finished their task, ran back into alignment again.

Based on information from my Russian source where he highlights that in Russia the view of the exercise itself has a perspective of *demonstration of abilities*, as opposed to the perspective in Norway where we *train the abilities*, I argue that this shows the difference between the cultures where Russia lean to High uncertainty avoidance and Norway to Low uncertainty avoidance.

Tactical operations

During the exercise for tactical operations there were also differences between the units training. According to the answers from my Russian source the Russian units after completing their assignments, did not know what to do. One of my Norwegian sources, on the other hand, described it as it seemed like the Russians were not interested in participating in the exercise at all, they seemed more interested in doing other things, and it also seemed like the Russians wanted to keep in control of their own units. If this is a valid observation it can be argued that this shows the difference in culture according to the variables from Hofstede; "*Collectivism*" described as cultures where people have strong bonds to their groups like family and friends to obtain good information, as well as mentioned above the variable "*Need of avoiding Uncertainty*", leaning to High Uncertainty avoidance. Russian units also reported that the local RSC did not seem to handle the complexity of the operation, the Norwegian on-site rescue commanders were characterized as inexperienced, unready (they had not rehearsed) and unable to organize large scale co-ordination and command.

Interestingly the tactical operations did not seem to work well according to Norwegian sources either. They described it as a co-ordination problem between the RSC Tromsø, the armed forces and other rescue resources.

4.3 Communication

Working in teams is increasingly more important internationally, as well as in organisations, locally, and nationally. Search and Rescue. SAR, demands very good communications skills, and technical know-how, to be able to perform successfully. SAR require a complex set of skills, not only to be able to know how a short-range radio, or a satellite radio works, but also abilities to express one-self understandably to the receiver of the information, as well as being able to read body language in terms of understanding what is not being uttered.

Communication is verbal, including different dialects and language, and non-verbal, defined as body language. Communication is performed horizontally and vertically depending on cultural heritage.

Political framework and management planning

According to one of my Norwegian sources the Russians did not bring decision makers to the initial meeting, or any other meeting throughout the planning process. Knowing that Russia is a hierarchical society this is not surprising for me as a student of Russian culture and communication. In the hierarchical societies communication often go vertically to the next level. The communication goes up the system until it reaches a decision maker before the answer travels down the chain the same way until it reaches the right person. Needless to say this is time consuming and slow. My Norwegian sources information is confirmed by the Russian source as he stated that all communication went through him. He also added that he would have liked to have more communication channels. Other than this the communication process on this level to work well.

When it comes to communications on management level generally Norwegian actors are very careful, they bring their own translators to meetings, and oral confirmations are always supported by written confirmations.

My sources did not particularly pin-point any big problems regarding the communicational levels, they were more concentrated on the difference between the languages on this level.

Tactical operations

The Russians experienced communications problems verbally as well as technically, with the RSC during the tactical operations. On the technical level the Russians were not supplied with the communication equipment necessary to perform successfully. According to my source in Russia, equipping personnel with the same technical equipment is normally done by the host country or local Rescue Service. The Russian units were only able to communicate by using their voice, which made it difficult in a complex situation. Another factor was that the Russian units reported that the RSC avoided them. They would not receive new orders when

they had finished their tasks. In addition the Russians experienced communication problems since they had too few English speaking personnel. According to Russian sources several of their people have now decided to learn English.

To fully understand the challenges of communication between different rescue resources I arranged a maritime rescue exercise in October. My findings were subsequently similar to those experienced in BR13.

Several sources reported communication challenges during exercise BR13. The Norwegian Cost Guard reported failed external coordination on their behalf, due to lack of communication between the RSC and the Coast Guard. The youth camp scenario showed that crucial communications between important resources such as the Joint Rescue Coordination Centre Bodø, Rescue Sub Centre Tromsø, and the Regional Emergency Medical Communication Centre failed. The evacuation scenario also experienced limited communication between strategic management and response personnel, and thus coordination across municipalities, counties, and internally between agencies failed. The tunnel accidents showed similar results. Communications between technical suport in the fire department was non-existing due to lack of radio communication, moreover there were issues in communicating with the Russian fire fighters, as well as communication within management.

Between the experiences from BR13, my sources reports, document studies, and my own experiences I believe it is safe to say that there is a need to practice communication. It seems that sharing information horizontally worked better than sharing information vertically. In all scenarios there seemed to be a lack of sharing information from the SRC, which can be explained by the fact that they communicate on a different frequency from the rest of the units. According to my findings, I believe that BR13 shows that there is a need for a better solution to communicate more effectively on all levels. Fortunately it seems like we share a very good diplomatic channel with Russia, which is a part of a very important communication channel.

Host Nation support – HNS, Corruption and Kompromat

I would like to take the opportunity to address three other vaiables; the Host Nation Support which was new during BR13, Corruption which is not mentioned in my empirical chapter as this is a very difficult theme to discuss with Russians, and I intentionally chose to leave it.

The last factor is Kompromat, also described in the theoretical chapter, and very difficult to prove empirically with primary sources.

The Host Nation Support was for the first time organised in Norway during an international exercise. I consider this a very important, and essential, part of cross-cultural co-operation wich require attention in the future, to establish a better foundation for cross-cultural co-operation.

Corruption is present at all levels in Russia, and we must therefore also assume this is the case in Search and Rescue. According to several corporate lectures from my study it is very important to know about corruption and make a stand before entering co-operation in Russia.

Kompromat is another factor useful to know about. If I were to translate this I would say it is simply gathering dirt about the next person, to use it for your own benefit whenever needed. This is not only present in Russia, and might be important to keep in mind whatever you do.

5.0 Findings and summary

I believe it is safe to argue that the findings during BR13 shows us that plans for the Norwegian SRR needs to be adjusted in regard to how management and communication acts between local, regional and national levels. As several participants argued that the exercise is too big and difficult to co-ordinate perhaps it is better to conduct several smaller exercises? This would help to map all Maritime SAR resources in the region. As findings shows, a gap between the armed forces, rescue units, and the local RSC was identified on several occasions. As such I believe a natural action to take in the future is to look at different solutions as how to reduce or close the gap. Perhaps it is an idea as one of my respondents suggested to use a degraded version of the military NORSYS system for mutual communication between all resources nationally?

As this study has shown it seems that there is a need for training in regards of being able to communicate properly. Moreover there seems to be a need for further cultural understandings, particularly between Russia and Norway, but also between the different system levels and resources, nationally and locally.

I will not draw any conclusions for this study as the phenomenon of Search and Rescue is a very dynamic area. However, I would like to encourage more research in the area. Maybe a

proper grounded theory study on a higher level, to generate a substantial theory for Search and Rescue, would be helpful to understand this complex phenomenon.

My interest in the High North and preparedness was the driving force to do this study, and I would like to add that the process of working with this research study has been both demanding and rewarding. I have studied Search and Rescue, Culture and Communication theoretically, to have a better understanding and background when conducting the research for this study. My methodology was chosen from the nature of the research question. As the phenomenon researched is a new field of study, and I have developed a fascination for Grounded Theory I chose to work close to grounded theory methods, and conduct a qualitative research based on personal interviews, observation and fieldwork, and document search. I studied the case of co-operation within Search and Rescue in the exercise Barents Rescue 2013. To understand the need for the former development of regulations in Search and Rescue, and regional and international co-operation, I looked at, and shortly described three incidents which I argue has been important; the Titanic disaster, the Grounding of Maxim Gorkij, and the Kursk disaster. Lastly I attempted to discuss the case based on my theoretical chapter and interviews, observations and documents. Although time has been short for such a large and complex area, I have been able to find that it seems like communication is an area which needs practice, and knowledge of cultural differences is important. I see that I could have worked more effectively and not spent so much time searching for literature and thinking. On the other side being able to spend longer time has made it possible for me to have two short term "internships" with the Norwegian Coast Guard Vessel Barentshav, sailing in the North-East Barents Sea for three weeks, and three days at 330 squadron "Sea King." The most challenging part of this research has been to find Russian sources willing to talk to me. This study is the end of my Master of Business Administration - Business in Russia at University of Nordland. To connect Search and Rescue to Business Administration I have attempted to connect corporate culture and communication with Search and Rescue. There have not been any studies on culture and communication in this specific area, and I assume many of the factors are relevant and valid in both Business and Rescue. Whether I have managed this successfully or not will be up to the reader t to determine.

Interview guide, report from observations and fieldwork, and report from exercise Vengsøy available from the author of this paper.

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