Civil-military Coordination in Disaster Operations

A case study of:
Swedish civil-military coordination between governmental organizations

Master Thesis in Business Administration
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Jönköping: May 2012
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Thesis within Supply Chain Management and Logistics

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Abstract

This research is an analysis of the major challenges and barriers confronted when considering civil-military coordination in disaster operations. The main objective of this study was to investigate Swedish civil-military governmental organizations strengths and weaknesses together with the intention of increasing civil-military coordination. This study is conducted, to provide knowledge on progress understanding the challenges for civil-military coordination for Sweden.

The main conclusion of the research addresses the findings from Swedish organizations views about conditions for coordination. Also the implications of coordination based on real-life experiences, such as the Haiti earthquake, into a greater civil-military coordinating in disaster operations.

Based on this analysis the Swedish organizations paradox remains that; at the same time of increasing demands on efficiency and effectiveness measuring organization’s performances, it presently has also the further demands and growing requests of military involvement in humanitarian operations. Thus, the issue of coordination becomes even more obvious amongst governmental organizations, in such way that it is challenging the current political policies, strategies and mandates, governing organizations today. Coordination becomes evident and illustrates the need for organizational changes; from traditional methods and processes, to a more useful and business oriented operations. Of which, greater efficiency and effectiveness should be the desired output. The question of coordination in disaster operations represents also motivation for organizations, to develop areas of performance in which greater use of their resources and capabilities can be achieved.

In view of these, logistical challenges, including clear differences in capabilities, values and focus that make organizations develop in different ways; good examples of coordination were presented. These were intended as a foundation for further discussions among Swedish governmental organizations.

Unresolved still, is whether increasing civil-military coordination is a marginal activity in the logistics area and consequently preventing the duplication and overlapping of tasks. Thus, it is more of an integrated activity that seeks to complement responses only partly, or is it more of a single strategy reaching higher effectiveness and efficiency of national resources? Finally, the empirical findings are highlighting the need for a coherent governance of the humanitarian issue in Sweden. Therefore signifying, the need for greater trust and understanding of each other which should be regarded as the most important factors in the development of efficient civil-military coordination. Including, the need for a national coordination platform in which organizations can coordinate and develop capability for coordination.
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Participating organizations

DOD Ministry of Defence
FBA Swedish Agency for Peace, Security and Development
FHS The National Defence College
FMV Swedish Defence Materiel Administration
FOI Swedish Defence Research Agency
GUA Griffith University, Australia
HUMLOG Humanitarian Logistics & Supply Chain Research Institute
MFA Ministry of Foreign Affairs
MSB Swedish Civil Contingencies Agency
OCHA Office for the Coordination of Humanitarian Affairs
PENNSTATE Pennsylvania State University
SAF Swedish Armed Forces, Headquarters
SIDA Swedish International Development Cooperation Agency
SOUTHCOM United States Southern Command
US DOD U.S. Department of State, Office of Coordination
WFP World Food Program, Port-au-Prince - Haiti
WFP United Nations Humanitarian Response, Panama
### List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CIMIC</td>
<td>Civil-Military Cooperation</td>
</tr>
<tr>
<td>CMCS</td>
<td>Civil Military Coordination Section</td>
</tr>
<tr>
<td>CMOC</td>
<td>Civil-Military Operational Center</td>
</tr>
<tr>
<td>DHA</td>
<td>Department of Humanitarian Affairs</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DPA</td>
<td>Defense Procurement Agency</td>
</tr>
<tr>
<td>ETC</td>
<td>Emergency Telecommunications</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
</tr>
<tr>
<td>FBA</td>
<td>Folket Bernadotte Academic</td>
</tr>
<tr>
<td>FHS</td>
<td>Swedish National Defense College</td>
</tr>
<tr>
<td>FMV</td>
<td>Swedish Defense Material Administration</td>
</tr>
<tr>
<td>FOI</td>
<td>Swedish Defense Research Agency</td>
</tr>
<tr>
<td>GO</td>
<td>Governmental Organization</td>
</tr>
<tr>
<td>GUA</td>
<td>Griffith University Australia</td>
</tr>
<tr>
<td>HFOCC</td>
<td>Haiti Flight Operation Center</td>
</tr>
<tr>
<td>HND</td>
<td>Haiti National Police</td>
</tr>
<tr>
<td>HQ</td>
<td>Head Quarters</td>
</tr>
<tr>
<td>HUMLOG</td>
<td>Humanitarian Logistics Research Institute</td>
</tr>
<tr>
<td>IASC</td>
<td>Inter Agency Sending Coordination</td>
</tr>
<tr>
<td>ICRC</td>
<td>International Committee for the Red Cross</td>
</tr>
<tr>
<td>IFRC</td>
<td>International Federation of Cross and Red Crescent</td>
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<tr>
<td>JOTC</td>
<td>Joint Operation Task Coordinator</td>
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<td>JTFH</td>
<td>Joint Task Force Haiti</td>
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<tr>
<td>MFA</td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>MINUSTACH</td>
<td>United Nations Stabilization Mission in Haiti</td>
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<tr>
<td>MSB</td>
<td>Swedish Civil Contingency Agency</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<tr>
<td>NDO</td>
<td>National Defense Organization</td>
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<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
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<tr>
<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>P a P</td>
<td>Port au Prince</td>
</tr>
<tr>
<td>PENNSTATE</td>
<td>Pennsylvania State University</td>
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<tr>
<td>RAKEL</td>
<td>Swedish National Telecommunication System</td>
</tr>
<tr>
<td>RiR</td>
<td>Riksrevisionen</td>
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<tr>
<td>SAF</td>
<td>Swedish Armed Forces</td>
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<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
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<tr>
<td>SOUTHCOM</td>
<td>United States Southern Command</td>
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<tr>
<td>TF</td>
<td>Task Force</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNCMC</td>
<td>United Nation Civil-Military Coordination</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
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<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for the Refugees</td>
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<td>UNICEF</td>
<td>United Nations Children Fund</td>
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<tr>
<td>UNJLC</td>
<td>United Nations Joint Logistic Center</td>
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<tr>
<td>UNJLC</td>
<td>United Nations Joint Logistics Coordination</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Name</td>
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<td>--------------</td>
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<tr>
<td>UNSC</td>
<td>United Nations Security Council</td>
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<tr>
<td>USDOD</td>
<td>United States Department of Defense</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Program</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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1 Introduction

This chapter presents a background of the civil-military challenges in coordinating disaster operations. Further, it will also provide perspectives of coordination of the logistical areas, among governmental organizations.

1.1 Background

In present times, the economic, social and environmental impacts of a natural disaster are still powerful and have made coordination essential. Several organizations, United Nations (UN), non-governmental organizations (NGOs), governments, civil and military organizations, are providing humanitarian aid and are in great need of coordinating efforts at the different stages of a disaster operation.

*Disaster operation is often described as a process with several stages such planning, mitigation, detection, response and recovery phases of a disaster (Douglas C. Long, 1995, p. 227)*

In addition, one must consider the large obstacles to be overcome allowing for coordination, as presented by the clear division of roles between humanitarian and military actors. These are in part explained, by organizational cultural differences and a lack of understanding of each other tasks. Moreover, military forces often possess high technological expertise and advanced technical equipment providing them with an advantage of maintaining, repairing, building, or controlling large infrastructures such as; bridges, airports, and roads. Therefore, it is important that the humanitarian community, civilian population, or other authorities and parties of a disaster, make the connection between military intervention and the arriving of actors into the area of the disaster. A clear distinction from any political agenda should be therefore the concerning of the military intervention. The challenge, is to maintain a distinct difference between the actors, otherwise, parties concerned may no longer be perceived as neutral (Jæger, 2009).

Additionally, in one of the recent reviews from decades of humanitarian crises, Kent (2004) concluded that humanitarian operations are becoming a large area of major concern for organizations. Thus leaders are recognizing that part of the success of the humanitarian operations is directly attributable to the logisticians’ efficiency and effectiveness in getting rapidly the necessary people, and supplies to the right place. Therefore, it becomes significant in identifying the supply chain advantages and challenges in the coordination, to exploring coordinators roles. Since success in coordination will be achieved if the coordinators characteristics are harmonized with in the chain and nature of disaster operations (Kent, 2004). However, coordination does not promise success in all situations, due to organizations may face coordination challenges such cultural and structural differences (Akhtar, 2012).

This is the case in Sweden, where the overall goal of humanitarian assistance is intended to be accomplished by adopting a flexible, rapid response designed to meet the needs of disaster operations. Accordingly, this will be conducted and completed with a robust coordinated worldwide humanitarian system and in an enriched coordination with other types of involvement and actors. Nevertheless, Swedish civil-military governmental organizations are facing the challenging of coordinating efforts in natural disaster operations, partly because of greater regulations on cost efficiency, together with the innovative and flexible performance
of tasks placed on governmental organizations. Those factors are therefore, engaging key staff officers at governmental organizations in discussions aimed to finding other solutions to the question of the military aid interpretation in natural disaster operations. In view of the fact that humanitarian and military actors are increasingly operating in the same geographical regions, which enable greater opportunities of coordination attributing to a greater efficiency and effectiveness of the logistics management, and the supply chains management.

Particularly, the objective of the military in Sweden is to provide a greater degree of support in disaster operations in closer coordination with humanitarian organizations. In contrast, Swedish humanitarian organizations are concerned about increasing coordination with military organizations, even though apparently, there are no principal obstacles or structural barriers limiting that coordination. However, the problem areas are concerning resources and financial issues; it appears efficiency is still not greater than principles and concerns. It is important to remember and consider that those same concerns were not an obstacle for operations during the Haiti earthquake.

While the Swedish military constitute an expensive resource to use, military capabilities should not be discussed as the main objective, but the means to reach the goal of saving lives as effectively as possible. Therefore, there should be no contradiction between the aim to save lives and that of efficiency. The Swedish military logistics capability may therefore, have to be reinforced with attitude and logistical methods adjustable for humanitarians. The military environment may need to involve humanitarian assistance in disaster operations, where logistics support should be a main strength and become a supporting force to humanitarian organizations. In addition, the humanitarian organizations in Sweden, can gain in being supported when the military are responding to the logistics needs in disaster operations, rather than the actual management of logistics assets in which responsibility lies on each individual organization.

Further, the logistics challenge in the future operational environment in Swedish governmental organizations, may have to anticipate and meet the logistics requirements, in disaster operations. Otherwise, there may become operational shortfalls. Swedish governmental organizations must therefore, continuously learn about what is happening and prepare for the next time. This can be achieved by encompassing the planning and management of all activities involved in sourcing and procurement in a well-coordinated supply chain. With additionally, assuring cost effective logistics management from the point of origin to the point of consumption in order to meet humanitarian’s requirements.

1.2 Specification of the problem

Although, the greater obstacles for coordination are founded on the division of roles between humanitarian and military actors, explained by cultural differences and lack of fundamental understanding of each other’s roles and tasks. This together with increased control on cost efficiency and effective performance of tasks. And as Whiting (2009) records, the number of disasters are on the ascend, thus the civil-military organizations are urged to coordinate in disaster operations (Whiting, 2009).

In this context, the challenge of coordination for civil-military governmental organizations arises due to the question of the military aid interpretation in disaster operations. This can be viewed together with the fact that humanitarian and military actors are operating increasingly in the same geographical regions. Therefore, there must be some other mechanisms providing
an opportunity for coordinated planning and management of the sourcing and procurement meeting humanitarian requirements.

The recent problems arisen, in this context are due to civil-military governmental organizations facing increasing demands upon the organizations of being more economic with state resources. Thus, by being more cost efficient, innovative and providing a more flexible performance of their specific tasks. Additionally, such political demands should include specific directions to organizations to managing arrangements and calculations in a coordinated way.

In this context, problems contributing to the coordination between governmental organizations can be regarded as, cultural factors and fear, together with a lack of understanding of each other skills and needs. Therefore, is to consider, the cumbersome and complicated processes when resources must be mobilized quickly, which creates inconsistency between the objective of saving lives and efficiency.

Further, civil-military coordination of logistics support becomes challenging in disaster operations, because of the different tasks governmental organizations are performing. Particularly, the logistics support in disaster operations, constitute a remaining lack of an overall interpretation of the mandate to organizations. Therefore, the logistics managing and planning should be supported as coordinated efforts meeting the needs for humanitarian response. Additionally, significant tasks that impacts civil-military governmental organizations are humanitarian principles. In this context, humanitarian principles in coordination should be concerned when limiting involvement of the military in humanitarian work and when the demands on humanitarian actors are not part of political strategies (Mazzaferro, 2007).

The problem we are contemplating in this thesis is how governmental organizations can deal with incompatibilities in civil-military coordination. Furthermore, to consider, is how coherent governance regarding implications in the humanitarian issue, can become the foundation for achieving the objectives of efficiency and effectiveness.

1.3 Purpose

The purpose of this research is to analyze the opportunities and barriers of civil-military coordination in disaster operations. The aim is to analyze Swedish governmental organizations strengths and weaknesses in their attempt to increase civil-military coordination in disaster operations.

1.4 Research questions

To increase understanding regarding coordination it becomes important to encourage key staff officers at organizations in discussions developing civil-military coordination. In order to support discussions, this research will consider answering following questions:

- What strengths and weaknesses are there for Swedish governmental organizations in coordinating for disaster operations?
- What opportunities and threats are impacting coordination among Swedish governmental organizations in disaster operations?
- In what areas can performance evaluation influences coordination of governmental organizations?
1.5 Delimitations

This research will not consider regional nor political issues. The research will neither consider disasters in communities affected by changing processes involving conflicts. The analysis focus is disaster operations, earthquakes, tsunamis, volcanic eruptions, and hurricanes. The research will be concentrated to analyzing opportunities and barriers to civil-military coordination among governmental organizations. Additionally, supporting the analysis of the challenges of coordination among governmental organizations in Sweden, the empirical research from U.S. Southern Command (SOUTHCOM) and the World Food Program (WFP) coordinating under the Haiti earthquake, will only be taken into account from lessons learnt from real life disaster operations.

1.6 Definition of key terms

In order to reinforce some of the concepts supporting this thesis and to avoid confusion with terminology, some key terms used in the discussion are:

**Civil-Military Coordination**
Referred to the essential dialogue and interaction between civilian and military actors in emergencies that is necessary to protect and promote humanitarian principals, avoid competition, minimized inconsistency, and when appropriate follow common goals. Coordination is a share responsibility facilitated by liaison and common training. Inter-Agency Sending Committee (IASC, 2008).

**Humanitarian Assistance**
Humanitarian assistance is the aid to an affected population that looks for, as its primary purpose, to save lives and alleviate suffering of an affected population. Humanitarian assistance must be provided with the basic humanitarian principals of humanity, impartiality, and neutrality (OCHA, 2007).

**Military Actors**
Referred to the armed forces (e.g. land, naval, and air) of a state or regional inter/governmental organization that are subject to hierarchical chain command, be they armed or unarmed, governmental or intergovernmental. This may include a wide spectrum of actors such as the local or national military, multi-national forces, UN peace keeping troops, international military observers, foreign occupying forces, regional troops or other officially organized troops (OCHA, 2007).

**Humanitarian Actors**
Humanitarian actors are civilians, whether national or international, UN or non-UN, governmental or non-governmental which have a commitment to humanitarian principles and are engaged in humanitarian activities. To the humanitarian actors belongs, international organizations (e.g. UN, UNHCR, UNICEF, WHO, FAO, IFRC), non-governmental organizations (NGOs) (OCHA, 2007).

**Logistics Cluster**
Under the United Nations Office for the Coordination of the Humanitarian Affairs (OCHA), the logistic cluster has the overall responsibility of global mapping of capacities and resources to respond to the needs of affected populations in disaster operations. This includes the clusters that are primary concerned with “service provision” (e.g. telecommunications and
logistics). The cluster system includes measures to enhance the response with existing collaborative approaches.

Organizations
For this case study, the term organization will be used as general term regarding governmental authorities and other entities in humanitarian area.

1.7 Disposition of the thesis

This thesis disposition will be accomplished in Chapter 2 regarding the frame of reference; which aims to create a platform of literary facts, constituting the outline in this research. Also considered are the facts for a deeper understanding of Civil-military Coordination, Supply Chain Management in a humanitarian and military context, and logistics management. Furthermore, in Chapter 3 the areas of methodology, the interpretative approach will be explained, as the methodological approach suitable to conduct this case study; completed with issues of data collections validity, reliability and improvement of the research quality. In Chapter 4 and connecting to the empirical findings, is a review of the observations from the Haiti experiences. This will be presented, together with the views, of Swedish civil-military governmental organizations. In Chapter 5 an analysis, will be linking those, in the frame of reference facts, to the empirical findings from the case study in order to answer the research questions. In chapter 6, conclusions and suggestions chapter aims to answer the research questions. 7, a discussion based on observations while carrying out the study, framed into theoretical and managerial implications bringing ideas for future studies.
2 Frame of reference

Here, a platform of literary facts constituting the outline in this research is reviewed. The supply chain management in a humanitarian and military context and the logistics management are framed into coordination and cluster theory.

2.1 The choice to coordinate

The choice to coordinate implicates many different topics, the topics chosen to explain coordination efforts will depend very much on the intention of the study. The key topic of civil-military coordination, for this research, is complemented with important other topics of literary value to obtain an overall picture of the coordination complexity. Some of those topics are; the general issue of coordination defined from organizations, strategy and logistics view. The second topic regards the essential flows of physical, information, and financial nature synchronizing the different supply chains. The third is the coordination of logistics processes, activities, actors, technologies and systems in a way to achieve efficiency (OCHA, 2010).

2.2 Civil-military coordination

The idea of coordination has a long history among a number of disciplines, including organization, strategy, marketing and logistics. Coordination is usually described as being somewhere between market and hierarchy, representing what in literature is called a hybrid form (Williamson, 1991). Coordination has also been defined as: ‘When two or more unrelated or competing organizations cooperate to share their private information or resources such as joint distribution centers’ (Simatupang, 2002, p. 17). Coordination can also be explained as being both vertical and horizontal. The vertical coordination between two parts of the chain, refers to organizations coordinating with upstream and downstream activities founded on arrangements between buyers and suppliers, to facilitate a mutual exchange over time leaving the operational and control of the business to act independently (Hughes, 1994). In the horizontal coordination different organizations coordinate and manage with each other (Fearne, 1998). Agreeing with theory of coordination table 1, visualizes advantages for horizontal and vertical coordination (Jensen, 2010)

Table: 2.1: Coordination aspects

<table>
<thead>
<tr>
<th>Type of Coordination</th>
<th>Horizontal</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>What to coordinate</td>
<td>Actors, activities, resources at strategic, tactical and operational levels in information money and materials flows for organizations at the “same” stage in supply chain.</td>
<td>Actors, activities, resources at strategic, tactical and operational levels in information, money and material flows for organizations at “different” stages in the supply chain.</td>
</tr>
<tr>
<td></td>
<td>Focus on the organizations and their specific tasks</td>
<td>Focus on the customer and synchronization</td>
</tr>
<tr>
<td>Why to coordinate</td>
<td>To achieve economies of scale and to reduce cost for individual organization.</td>
<td>To reduce overall supply chain costs but can increase cost for some actors.</td>
</tr>
<tr>
<td></td>
<td>To have access to more physical resources, information and competences.</td>
<td>To improve customer service through smoother flows</td>
</tr>
</tbody>
</table>

Source: adapted from (Jensen, 2010)
2.2.1 The choice to coordinate

In the participation of a disaster response, the first phase in the process is for each actor to consider whether or not to coordinate. Depending on its task, mandate and field, each actor can accomplish an internal as well as an external analysis to make this decision (Huyzer, 1990). The purpose of the internal analysis is to obtain a clear understanding of strengths and weaknesses of the respective organization and for competitive advantages and organizational weaknesses to be corrected (Pearce, 2003). Moreover, the purpose of the external analysis is to obtain a deep view of the external environment; this will result in the identification of opportunities and threats of the external situation. Based on the internal strengths and weaknesses as well as the external opportunities and threats, each of the actors can decide whether or not they should start coordination (Gourlay, 2000). This states that a hopeful way forward is to adopt models for coordination between the military and civilian actors. Those models can help in synchronizing skills achieved in previous operations. Also, developing specifications and increasing understanding of potential conflicts in the processes of coordination, should increase the coordination performance. Further, having decide to coordinate, organizations have to discuss the design of the relationship which may conclude on an agreement binding the partners, which according to Larsson (1992), should be based in flexibility and trust (Larson, 1992).

While discussing civil-military coordination, attention must be taken to clarify the explicit relationships. Cooperation refers to the state of civil-military coordination relations between humanitarian actors and military forces that are not regarded as a combat force. This is classically including joint planning, division of labour and sharing information. The United Nations (UN) and the North Atlantic Treaty Organization (NATO) views of coordination appears to be one of the reservations, because in the NATO context, cooperation is understood to imply a less binding relationship than in the coordination context, and NATO claims that humanitarian actors will be willing to cooperate, but not coordinate and therefore they use cooperation as context (NATO, 2004) (UNOCHA, 2006).

Organizational Contribution

The United Nations Humanitarian Civil-Military Coordination (UN-CMCoord, 2005) is a part of the Office for Coordination of Humanitarian Affairs (OCHA) which has arisen as the successor to the UN Department of Humanitarian Affairs (DHA) in January 2008. The DHA was created due to the frustrations of major donors to effectively coordinate their activities under the Gulf Crisis in 1991. OCHA is based in Geneva, Switzerland and offers international societies services extending from development of guidelines and documentation, facilitating training programs, supporting military exercises and field exercises.

Further, the UN-CMCoord develops the planning, information sharing and task division between military and civilian organizations in disaster operations. As logistics associates, almost all the stakeholders in humanitarian operations, the role of UN-CMCoord is vital (Weiss, 1998).

Accordingly, OCHA coordinates through facilitation. It facilitates civil-military coordination before, during, and after humanitarian crisis and further, sustains guidelines within coordination processes. The central point for civil-military coordination in the UN lies within the OCHA section called Civil-Military Section (CMCS). The Civil-Military Operation Centers (CMOCs) are frequently established gaining humanitarian space by the joint force
commander assisting in the coordination of military activities and other organizations. The structure differs matching the size and arrangement required of any given situation.

Additionally, humanitarian divisions dispose of a number of coordination mechanisms through a number of different policy making bodies, often with military groups providing needed funds, information and products. These groups are shown in table 2, below, highlighting the need for consolidation of governance and processes with many actor using different systems.

Table: 2. 2: Humanitarian coordination mechanism and objectives

<table>
<thead>
<tr>
<th>Coordination Mechanism</th>
<th>Objective</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERF (Central Emergency Respond Found)</td>
<td>Stand-by disaster response funds</td>
<td>OCHA</td>
</tr>
<tr>
<td>CAP (Consolidation Appeal)</td>
<td>Funds Mobilization</td>
<td>OCHA</td>
</tr>
<tr>
<td>UNDAC (United Nations Disaster Assessment and Coordination)</td>
<td>Disaster needs assessment</td>
<td>OCHA</td>
</tr>
<tr>
<td>HIC (Humanitarian Information Center)</td>
<td>Information</td>
<td>OCHA</td>
</tr>
<tr>
<td>MCDU (military and Civil Defense Unit)</td>
<td>Civil-military coordination</td>
<td>OCHA</td>
</tr>
<tr>
<td>UNJLC (United Nations joint Logistics Command)</td>
<td>Humanitarian logistics</td>
<td>WFP</td>
</tr>
</tbody>
</table>

Source: Adapted from (Barber, 2008; UNOCHA, 2006)

However, to bring understanding of the complexity regarding the framework forming the body regulating civil-military coordination, here are the various guidelines supporting humanitarian principals and civil-military involvement under the OCHA governance:

- Discussion Paper and non-binding Guidelines on the Use of Military or Armed Escorts for Humanitarian Convoys, 2001
- IASC Reference Paper on Civil-Military Relationship in Complex Emergencies, 2004
- Country specific Guidance (examples includes; Afghanistan, Iraq, Liberia, Sudan and Haiti)

Closer and since it becomes important in this analysis, the Oslo Guidelines, 2006 refers to the engaging of military support for humanitarian operations. Through, the military becoming more involved in the provision of aid, while the humanitarian actors increasingly facing no alternative, but to rely on the military, as a “last resort” for safety and to access populations in need. However, this presents the risk of compromising their neutrality, impartiality, and/or their impartiality to operate. Further the “Last resort” should be seen as a tool complementing existing relief mechanisms in order to provide specific support to specific requirements, in response to the acknowledged “humanitarian gap” between the disaster needs the relief community is being asked to satisfy and the resources available to meet them. Therefore, foreign military and civil defense assets should only be requested where there is
not a comparable civilian alternative and only the use of military or civil defense assets can meet a critical humanitarian need (Oslo Guidelines, 2006).

2.2.2 The humanitarian space

The discussion of humanitarian space is important for this research, because the humanitarian space exists in a physical and a virtual sense and is the goal of all humanitarian. Humanity, neutrality, and impartiality, conform the humanitarian organizations space in which they can properly conduct humanitarian work. Here according to Tomasini (2009), the description of the principles with regard to:

- **Humanity**: implies that human suffering should be relieved wherever found.
- **Neutrality**: implies that relief should be provided without bias or affiliation to a party in the conflict. One of the basis of neutrality is that agencies may choose to not to participate in local issues if there is a risk of getting trapped by political agendas.
- **Impartiality**: indicates that assistance should be provided without discrimination and with priority given to the most urgent needs (Tomasini, 2009).

Additional, the humanitarian space in the physical sense represents the zone where civilians, non-combatants and aid workers are protected from violence and attacks and are able to move and operate freely. Indeed, establishing and maintaining the humanitarian principles is a difficult task. Furthermore, such difficulties arise because the space is dynamic and changes rapidly occur based on the conditions of the field. (E.g. security could limit access to certain areas and weather conditions can have an adverse effect on natural disasters areas). Further, in the virtual sense, humanitarian space represents the interface between the different members of the humanitarian environment and the way in which they create an environment where their mandates can be executed. Retaining humanitarian principles in complex environments is often difficult, as in the Southern Africa famine case, where the prohibition of genetically modified maize affected relief efforts (Tomasini, 2009).

2.2.3 The military space

Of importance is also the discussion of the military space in humanitarian operations, since it is known that obstacles in civil-military interactions has made it difficult for soldiers to extend their mandates and provide assistance in disasters operations. However, the mandate is often a compromise creating uncertainty which leads to different interpretations of tasks by actors in a conflict or in disaster support element. Nonetheless, the latest mandate to the military forces includes dedication in warfare, peace keeping operations and since the 1990s disaster operations and humanitarian aid. The military forces enter into disasters operations providing aid under the UN specified mandate. The mandate varies distinctly between the civil and the military organizations; humanitarian organizations has a clear mandate to assist impartial aid programs to people suffering, while the military involvement in peacekeeping operations objectives have their inescapable partial and political mandates. The distinction of these missions must; however, be kept in the humanitarian space while the supply chain management delivering the support to disaster operations seems to have gained attention because of its efficient and effective results (Barber, 2012).

The delivery of aid provided by military forces is not a new singularity; therefore, the military seems to become more engaged by their governments when disasters occur. Conflicts since the end of the Second World War and particularly, after the Cold War has altered thinking
into improving and increasing the participation of military assistance in disasters operations (Barber, 2012).

Of course, this fact has increased pressure on national decisions makers to respond with a large international military presence to keep peace and support the response in the disasters operations. Indeed, these are efforts often agreed on the basis of saving of lives, demanding massive logistical and material support and engagement of significant logistical assets. However, the military involvements in humanitarian operations challenge different organization cultures. Therefore, greater stability ensures humanitarian organizations to be free and for available military resources to be utilized. Subsequently, the issue of an increased civil-military coordination basically deals with two important aspects of military support to civilians, explicitly the provision of security, e.g. a military escort for humanitarian convoy, and secondly the provision of military assets including skills, knowledge and manpower e.g. equipment such as trucks, or helicopters and also skills of medical and engineering expertise (Heaslip, 2009).

2.2.4 The cluster approach

Meanwhile, logistics performance in disaster responses becomes important because of its strong impact through the supply chain flows, from source to the final customer and because of the impact on trade, competitiveness and efficiency. Accordingly, an issue for this research constitutes the discussion of coordination of logistics challenges. According to Porter (1998), the term ‘cluster’ refers to a geographic concentrations of interconnected companies and institutions in a particular field’ (p.78) which ‘allows each member to benefit as if it had a greater scale or as if it had joined with other without sacrificing its flexibility’ (p.81) (Porter, 1998). Giving to this Patti (2206), anticipated that clusters of similar or complementary products that requires basic skills, raw materials and specialized equipment, benefits from competition and cooperation through increase productivity, because they provide better access to employees, suppliers, public institutions and specialized information, and growth availability of complementary products and services and motivation and superior measurements (Patti, 2006).

In line with much of the logistics literature, the cluster concept was introduced to improve efficiency in the humanitarian field. Therefore, the logistics cluster discussion will describe the role of logistics cluster tasks in the coordination of disaster operations and its role in the supply chain management (Jensen, 2010). Logistics cluster is responsible for preparedness (including stockpiling) and emergency response with regards to logistics coordination (OCHA, 2007). The World Food Program (WFP) has the global lead for the logistics cluster and determines the needs of organizations that concentrate on logistics and also serve the other cluster in their logistics. The logistics cluster is given the task of controlling critical functions through direct authority during the early phases of the disaster. For instance, air transportation which often becomes the only viable alternative and has strong impact on the operation central and local capacity building this can lead to operational responsibility for air traffic control. But most important, in terms of logistics is the ability to prioritize cargo so that indispensable items reach the disaster area as soon as possible and that all clusters have access to transport (Jensen, 2010).
2.3 The supply chain management – General approach

For this research, the Supply Chain Management (SCM) concept becomes essential, because it frames aspects for efficient and effective flows important for the performance of civil-military organizations between Swedish organizations. The SCM model captures the attention of senior-level management in numerous organizations providing the potential impact of making organizations more globally competitive and increasing market share with consequent improvement of shareholder value. Supply chains are important determinants of capital consumption since they impact working capital, inventory levels and other assets such as warehouses. Efficient and effective supply chains can free up valuable resources and improve customer fulfillment systems so as to increase return on investment or assets (Langley, 2008).

Figure: 2.1: A view of a Supply Chain (Langley, 2008)

Real world supply chains are usually more complex than this example shows and this is because they can have more supply chains participants coordinating in a non-linear way. Likewise, this example of supply chain does not portray the importance of transportation. Additionally, some organizations may be part of several supply chains providing parts or ingredients for many products manufactured by different companies. However, the figure provides sufficient perspective to understand the basis of a supply chain. The definition that becomes part of the drawing shows several important aspects;

*The Supply Chain Management is an extended enterprise that crosses over the boundaries of individual firms to expand the logistical related activities of all the companies involved in the supply chain. This extended enterprise attempts to execute or implement a coordinated, two way flow of goods, services, information, and financial (specially cash) (Langley, 2008, p. 18)*

The Supply Chain Management encompasses the planning and management of all activities involved in the sourcing, and procurement, conversion and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence supply chain management integrates supply and demand management within an across companies (CSCMP, 2009).

The top flow, *products and related services* is a very important element in supply chain even if it has traditionally been an important focus of logisticians. Customers anticipate their orders will be delivered in time and in a damage-free way. Thus, transportation becomes critical to this outcome. The second flow indicates the *information*, one of the realizable outcomes of the supply chain, by sharing sales information in a more real-time basis, leading to less
uncertainly. For this reason, less safety stock has become a particularly important factor in the supply chain management. The third and final flow is *financials* or more exactly cash turn out to have a major impact in the supply chain solidity and faster order cycle times persevering faster cash flow. The faster cash to the flow cycle has been a wealth for companies because of the impact on working capital. Cash flow measures have become important for financial markets regarding the vulnerability of companies. Additionally, supply chain management offers organizations the chance to reduce cost (improve efficiency) and develop customers service (effectiveness). However, certain challenges must be addressed before supply chain management will be efficacious. Subsequently, the major challenges impacting the successes of the supply chain issues are an important part for this research, because it engages organizations attention to areas that requires attention. According to Langley (2008), those major issues are:

- **The Supply Chain Networks** is handling rapid changes with a flexible response.
- **The Complexity**, approaching organizations to simplify the various aspects of their supply chains, which do not contribute to profitability.
- **The Inventory Deployment**, providing supply chains the opportunity to reduce inventory levels.
- **The Information**, regarding to challenges and also the potential of sharing information along the supply chain and the discipline to ensure the integrity of the data collected.
- **Cost/Value**, also challenging the supply chain in preventing sub-optimization, which means that cost and value at the very end of the supply chain are what it is considered important.
- **Organizations Relationships** are recognizing the importance of internal collaboration with marketing, sales operations and finance as well as collaboration or cooperation with external organizations.
- **Performance Measurements**, emphasize the lower-level metrics in an organization that must be connected to the high-level performance measures of the organizations and the supply chain, and are often net profit return of investment, or assets and cash flow.
- **Technology** is viewed as a change driver and important facilitator of changes leading to improve efficiency and effectiveness.
- **Transportation Management** is acknowledged as the glue that makes supply chain models function. Since the critical outcome of the supply chain is to deliver; the appropriate product at the right time, in the right quantity, with quality at the right cost, and to the right destination.
- **Supply Chain Security** which provides the supply chain with anticipated challenges and also the potentially safe and reliable delivery of the products to customers. This is normally accepted as granted, with globalization adding to the exacerbated risks of interruptions or shutdowns of supply chains, which is becoming increasingly more prevalent (Langley, 2008).

Since the intention of this research is to provide support to Swedish civil-military governmental organizations in discussions, in which logistics efforts can be coordinated. Thereby, assisting disaster operations in being conducted effectively; managers within Swedish organizations, may consider that success to logistics coordination will greatly depend on the organizations ability to interact flows of information, material, money, manpower and capital equipment. According to Porter (1982), the main reason behind the formation of a supply chain arrangement is to increase a competitive advantage by equipping organizations with leadership being able to deal with efficient-scale facilities, cost reductions founded on
experience and tight cost and overheads control. Resulting with, flows interaction supporting one another causing changes which will be supporting variation in forecasts affecting decisions, policies, organizational forms, and investment choices (Porter, 1982).

For the purpose of this research, a tight integration among the supplies chain members will be required for the effectiveness of the supply chain management and for the coordination of the logistical efforts. Since coordination requires performing focal activities in a business relationships in order to produce mutual outcome. Important is that those mutual expectations over time, should be played in a harmonized manner. In addition to planning and control coordination the logistics efforts, in this case, are needed to reduce supply chain inventories and ensure supply chain with wide cost efficiencies (Mentzer, 2001).

Supporting the discussions and in order to increase understanding of the theories behind the humanitarian and military Supply Chain Management approaches, here a briefly description of some of the particulars of each of the approaches.

2.3.1 Supply chain management – Military approach

Of the upmost importance is the subject of military supply chain management. This acknowledges the military’s capacity for preparedness; since they are a professional, dedicated, organized and trained body with high levels of preparedness. Generally speaking, military forces and their logistics divisions in particular, have centralized decision making in well organized and rapidly implemented command and control systems. They follow standardized procedures based on joint logistics systems and managed through the three service levels of: air force, army and navy, depending on the most efficient means of distribution (Barber, 2012).

The Military supply chain has at their disposal rapid movements from specialized aircraft, such as their cargo aircraft and the capacity of high volume and mass movements provided by their cargo shipping. Military ground-forces are able to provide secure warehousing and robust road transportation capable of transportation across harsh terrain. Further, it is important to add that the military supply chains are dedicated to warfare, peace keeping missions and since the1990s, disaster relief and humanitarian aid (Barber, 2012).

In order to bring understanding about the potentials of the military supply chain management, Murkowski (2010), figure below, charts a conventional chain of supply demand relationships. The military supply chain in figure 2, regards the military as the domestic producer of the products of the defense value chain, and the agency responsible for the formation of military capabilities, that allows the government to select an appropriate military response options when a particular threat to national security materializes (a military contingency).
Further, the general approach of the Defense Procurement Agency (DPA) shown in figure 2 is a distinct organizational element within the National Defense Organization (NDO) and some national security outputs are imported from allies. The focus of figure 2 is on the part of defense production value chain that links upstream industry with downstream military capabilities. To form these capabilities, the DPA sources inputs, such as defense material, from domestic and foreign industry suppliers. Thus, a supply chain is formed in which upstream suppliers provides the downstream DPA with goods and services that are used in the formation of military capabilities. As can be observed in Figure 2, the supply chain runs from left to right, but the social value of national security is indicated downwards. Defense demands for industrial supplies drives industry sales and determine the value of upward industrial capabilities. Figure 2, also shows exports providing upstream suppliers with an alternative source of demand. Finally, it highlights the opportunity for de-coupling supplies and demands for industry products as defense may create stocks of military material, which allows it to source its supplies from industry at rate different from the rate as it uses these products. Here below, a briefly discussion of each of the actors represented in figure 2:

- **The Government:** In democracies Government derives authority from the will of the people to allocate resources to the defense of the community. It determines the range of outputs which defense is required to produce and provides it with resources and the institutional support to form the necessary capabilities. A high level task for Government is to determine its national security strategy for which, ultimately, in a democracy, it is answerable to the electoral.

- **Defense:** Military organizations exist to implement the strategy policy of the Government. Generally, this task is entrusted to a dedicated government agency, the NDO, which specializes in the activities that surround state-sanctioned use of lethal force.

- **The Defense Procurement Agency:** The procurement of military material needed by defense may be undertaking by a single, specialized organizational unit, or dispersed between larger organizational elements such as the services, or delegated to detached specialized procurement agency which approach is a matter for defense and-or government.

- **Industry Suppliers:** Industry suppliers possess the industry capabilities. Domestic defense suppliers are often viewed as the support arm of defense. Then the meaning of defense industry is rather vague, but in principle, domestic defense industry comprises all those
elements of in-country industry capable of undertaking work for the armed forces or export defense-related products to other countries. In the defense-related industry, the trade-offs are also constrained by political influences and economic realities.

In addition, according to the purpose of this chapter, becomes important to emphasize on the logistics management aspects that of important support in the discussions of Swedish civil-military coordination in disaster operations (Markoswki, 2010).

### 2.3.2 Supply chain management – Humanitarian approach

A brief review of characteristics of the humanitarian supply chain is appropriate in order to bring understanding about the strains that humanitarian organizations encounter when interacting in their supply chains. The following provides an explanation aimed at enhancing readers understanding. Indeed, in the commercial sector, flows in supply chains are sometimes in three areas: boxes, bytes, and bucks (Tomasini, 2009). While in the humanitarian supply chain, a fourth and fifth area are being added and is in regard to bodies and brains, representing people, and their knowledge and skills. However, the different types of flows are important to mention in humanitarian supply chains. These flows are of equal importance and present a challenge for managers in the humanitarian sphere; since disruption in one of flows can have an effect on the remaining areas with serious and expensive consequences (Tomasini, 2009).

Therefore, the key issue is to be able to combine all five flows into a perfect execution plan, thus producing an adequate and contained response in disaster operations. The figure 3 below charts the flows of importance from a risk management perspective which an interruption in one of them is likely to have a direct impact on the others. With closer examination of Figure 3, one can observe that the humanitarian supply chain consists of five essential flow areas of interaction for humanitarian activities in disaster operations (Tomasini, 2009).

In addition and of importance, is the use of supply management techniques which are highly popular in the humanitarian arena and consider cross functional and inter-agency approaches which are becoming more common.

![Humanitarian SC Flows](Tomasini, 2009)
Therefore, the five flows of humanitarian supply chain must be supported by coherent business models in an appropriate design of arrangements, with executing the flows from end to end. Those five humanitarian supply chain flows constitute:

- **Material (Boxes):** Represents the physical product flow from suppliers to customers as well as the reverse flow for product returns, servicing, and recycling.
- **Information (Bytes):** Represents the order transmission and order tracking which coordinates the physical flows.
- **Financial (Bucks):** Represent the credit terms, payment schedules, and consignment arrangements.
- **People (Bodies):** Represents the manpower deployed at each intervention to implement the supply chain.
- **Knowledge and skills (Brains):** this is particularly important in the humanitarian sector since each time a supply is deployed in response to a disaster the required skills need to be quickly reconfigured; that is, every supply chain is new and different.

The private sector experiences shows that the development of supply chain management is also a result of other factors including the information revolution, greater pressure for perfect orders e.g. adaptable and agile and new forms of inter-organizational relationships (civil-military) and the increasing cost of logistics issues (Tomasini, 2009).

### 2.4 Logistics management

A general approach regarding logistics management is appropriate for this research, bringing to surface theoretical backgrounds impacting efficiency and effectiveness of the supply chain. Logistics management is widely accepted term and incorporates logistics not only in private business but also in the governmental and non-profit organizations. For the purpose of this research, the definition of logistics management;

*Refers to the part of Supply Chain Management that plans, implements and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers’ requirements (CSCMP, 2009, p. http://cscms.org/aboutcscmp/definitions.asp.).*

However, it is important to acknowledge that logistics owes its origin to military forces which has long recognized the importance of logistics activities for national defence. Further, the logistics concept began to perform in the business areas under the label of physical distribution, focused on the outbound side of the logistics system. Logistics play a very important role in fundamental economy utility and value to a product or service; regarding form, time, place, quantity and possession. Often production activities are recognized with providing form utility; logistics activities with time, place and quantity utility; and marketing activities with possession utility (Langley, 2008). Figure 4, visualizes the scope of logistics activities limiting is a dotted line that separate the components of logistics from its environment. The limiting represents the sphere of control of the logisticians and there possible influence on their environment (Overstreet, 2011)
Moreover, given the scope of logistics activities it is important to keep in mind those activities' relationships to logistics. Such is the case for Transportation, becoming the largest variable for logistics cost, performing in the physical movement of goods on a network that moves the product. Inventory Management, founded in both warehouses and manufacturer facilities, inventory management has two dimensions; guaranteeing adequate inventory and certifying inventory truthfulness. Procurement; the basic reason for including procurement in logistics is due to that transportation costs relate to geographic location (distance) of raw materials and components parts purchase for an organization manufacturing needs. Customer Service has two dimensions (i) the process of networking directly with the customer to influence or take the order and (ii) the levels of services an organization offers to customers; also, logistics is concerned with being able to assure the customer, at the time the order is placed, and also when the order will be delivered. Planning or scheduling is closely related to forecasting in terms of effective inventory control. Equipment and Infrastructure, logistics managers are interested in the movement of goods into a warehouse, the placement of goods in a warehouse and the movement of goods from storage order to picking areas to areas of transportation; material handlings have important impact in warehouses design and the efficiency of the operations. Communication and Information Technology, the accumulation and storage makes information a powerful tool for logistics if it is accurate, timely, managed and shared; it can become an addition for the inventory, because it can reduce uncertainty. The last point is one of the causes leading to the accumulation of safety stock. However, the challenge is the sharing of information along the supply chain with the discipline to ensure reliability of the data collected (Langley, 2008).

### 2.4.1 Logistics management role in disaster response

Logistics performance has been demonstrated to have an impact in trade competitiveness. Yet, why is this important in a disaster response? Kovács (2007), sees the commercial supply chain as a process of managing the flows of goods, information and finances from the source to the final customer. Equally to commercial logistics operations, logistics in a disaster response struggles with conflicting interests of stakeholder and with unpredictable demands. Clearly, there are differences between commercial and humanitarian logistics. The most important difference can be seen regarding the incentives in improving the logistics operations. The incentives for private companies are being monitored and measured by...
profitability; however, in case of humanitarian logistics the output of the performance could be measured in human lives (Kovács, 2007).

Further Kovács (2007), accentuates that it is crucial for a humanitarian operation to know what the preparedness level is in a pre-disaster area. The area of preparedness level can be seen as terms of infrastructure such as road network, access points, electrical grid and medical centers in regions. Because of the uncertain characteristics of disasters, logistics performance and particularly, different levels of national preparedness, the organization’s preparedness seems vital in humanitarian responses. Moreover, in research logistics performance is often discussed as the logistics performance of an organization, a supply chain or a supply chain network. Unfortunately, when searching for more specific nation logistics performance, there is a limited amount of research conducted on such national specific logistics performance. Logistics performance indicators and diverse indexes are used to show what different nation’s performance logistics area (Kovács, 2009).

Moreover, there are different performance indicators and several different factors that are included in the calculation influencing the logistics performance in an area. Indicators of time, cost, and indicators of complexity and risk factors are included (Hausman, 2005). As discussed, the logistics performance in a country seems to have direct link with trade competitiveness. Therefore, efficient logistics play an important role in the global flow of goods and services; for example, companies in nations with superior logistics have a higher profitability of attracting foreign direct investment. While logistics inefficiencies harm the competitiveness in their effect in both time and cost (Shaluf, 2007).

Summarizing the contrast between business and humanitarian logistics in table 3; while time is money in business logistics, time is life to humanitarian. Humanitarians seek social impact rather than profit; still they must be watchful of donors and budget limits. While a supply chains must be flexible and responsive to unpredictable events, as well as efficient and able to maximized scarce resources, more effective supply chain management can be the difference between life and death; maximum efficiency means serving people in need.

**Table: 2.3: Business vs. humanitarian logistics**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Logistics Context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Business</strong></td>
</tr>
<tr>
<td>Purpose</td>
<td>Economic profit</td>
</tr>
<tr>
<td>Context</td>
<td>Uninterrupted</td>
</tr>
<tr>
<td>Perspective on time</td>
<td>“Time is money”</td>
</tr>
<tr>
<td>Source of Funds</td>
<td>Paying customers</td>
</tr>
</tbody>
</table>

Source adopted from (Murray, 2006)

There are great opportunities to serve people in need at lower cost through the supply chain, indeed the pressing challenge of humanitarian supply chain still be to balance the conflicting objectives of flexibility and efficiency (Murray, 2006).
2.4.2 Logistics management in the military context

Military logistics, an overall approach refers to the description of a planning and carrying out movement and maintenance of forces in its most comprehensive sense and in aspects dealing with design, acquisition, storage, transport, distribution, maintenance, evacuation and dumping of materials. Together with the transportation of personnel, operations and dispositions facilities, services, and medical and health service support (Skoglund, 2008). Recently, there has been an increasing proposal to practitioners operating in military areas to deal with their supply chain flows by describing, planning and managing the movement and maintenance of forces, and equipment into areas of disaster operations.

In line with the NATO definition; 
Military logistics is the planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, the aspect of military operations which deals with: design and development, acquisition, storage transport, distribution maintenance, evaluation and disposal of material; transport of personnel; acquisition or construction, maintenance, operation and disposition of facilities; acquisition or furnishing of services; and medical and health service support. (NATO, 2007, p. 7)

The United Nations Joint Logistics Coordination (UNJLC) guarantees the coordination of logistics and information; military organizations also have well developed structures aimed to achieve effective and efficient coordination of the logistical flows and processes of the supply chain. The military with its consistent capacity of being in a state of preparedness, together with some aid organizations, are often first in disaster areas in gathering information, reconnaissance and providing intelligence. Consequently, the military forces often become the natural leaders in such disaster operations. They are able to deploy a rapid response into the areas together with efficient physical flows. The military physical flows of supply chain management into the affected areas are classically intended for peace keeping scenarios, coordinated in an international or bilateral technique. Further, within the context of the guidelines OCHA, 2101-2013, aiming to improve response with solutions adding major contributions of military logisticians, with ability to rapidly deliver their knowledge to the response requirements, e.g. the use of well trained and exercised chains, insures the responsiveness to the required needs of victims in disaster (Barber, 2008).

2.4.3 Logistics management in the humanitarian context

As part of the discussions of civil-military coordination, it becomes important that humanitarian logistics discussion occurs, to create a complete approach of coordination between civil-military organizations. Humanitarian logistics have recently been considered to be a very unique issue, due to the high frequency of disasters occurring in less developed regions with inadequate infrastructure. Resulting, with a lack of coordination between consumers and the carriers, increasing the need of coordination of military and civilian efforts and increasing the requirement for establishing distribution networks in very tense political environments (Kovács, 2007). Meanwhile, logistics is becoming a very important factor in humanitarian relief operations. According to Tatham (2007), the logistics efforts accounts for approximately 80% of the cost of disaster relief operations while commitments enhancing coordination between civil and military organizations, be taking a central part within the field of business logistics as whole (Tatham, 2007)
Moreover, previous research in this field has concluded a diversity of factors that influenced humanitarian logistics complicating the nature of the problems and bringing extra issues of complexity into the humanitarian logistics operation (Pettit & Beresford, 2005). Indeed, complexity has increased during the last two decades due to the increasing of direct engagement of military forces into the humanitarian aid delivery which consequently, has created a trend and observed by the international community; and as result given initial to several initiatives at national and international levels in different countries (Barry, 2002).

All disasters, despite their nature or type have a common denominator: the severe impact they have on people’s lives, properties and environment. Further, how are such impacts measured? Various researches have attempted to quantify the disaster impact on populations and on nations, and the conclusion is that disasters not only have impact on the population, but also a long-term negative impact on a nation’s economic development (Shaluf, 2007).

Therefore, explaining the relation of the logistics in the humanitarian and military context becomes important regarding the dilemma of efficiency. Furthermore, this can partly be explained by heavily focusing on the effectiveness that logistics represents. This means enabling functions and arranging for political objectives affecting success or failure, that can mean life or death for people engaged in operations. Major opportunities for cost efficiency of the logistics functions can therefore, come only by transforming the political processes to produce effective ways of supporting disaster operations (Tuttle, 2005).

Finally, the role of logistics in humanitarian relief has, as has been earlier mentioned, gained more attention in recent times (Whiting, 2009). Most military organizations have doctrinal documentation, covering military involvement in humanitarian activities. The key challenge of impartiality appears not to impact so harmfully on the humanitarian supply chains and the military support of those chains. The reaction of people in response for military involvement in humanitarian operations is therefore, posturing challenges, becoming an area for further research (Barber, 2008).
2.5 Coordination profile model

Summarizing the theoretical discussions, the coordination theory reveals general grounds in which organizations can actively choose to coordinate or not; by evaluating internal strengths and weaknesses and external opportunities and threats. The supply chain management theory reveals the multitude of activities, processes, physical flows, logisticians can provide through the various steps in the supply chains. Also, the military supply chain becoming part of the military contributions that can play an important role in the humanitarian supply chains. Further, the body of coordination governance, and processes, is presented as part of using a system to prevent overlap and non-interoperability becoming a major limitation to the various logistical flows.

![Coordination Model](image)

**Figure: 2.5: Coordination Model from (Overstreet, 2011) reconstructed by author**

From the various theoretical discussions, a model has been created to support analysis and bring structure to the empirical findings.

**Purpose of the model:**
The purpose of the model is to chart factors of coordination from the empirical findings into the theoretical frames areas presented earlier. The idea of charting the internal factors is analyzing if the conditions for conducting disaster operations today are in line to the effective and/or efficiency demands on governmental organizations. Those conditions will visualize organizations strengths and weaknesses, in providing coordination contributions. Further, by mapping external factors related to disasters needs in fields of operations, a provided framework of analysis is obtained for identifying opportunities and threats for organizations coordinating in the field of operation. Opportunities and threats will greatly depend upon, on how efficient relationships, planning, and experiences, along the supply chain, have been managed for the disaster operations.
Developing the model:
The framework was developed by bringing together the most important theoretical backgrounds in order to meet the empirical findings, creating in that way the foundation for the analysis in order to create relevant deductions and implications for further studies.

Connected areas in the model:
The areas in the model are connected with each other in a sense presenting an overall picture of the complexity in discussion. Regarding the logistical areas, those are surrounded by dotted lines, representing the great potential that logistics embodies for organizations effectiveness, independent of the type of operation. That means that organizations can independently improve their logistics and adapt their planning to a desired level of coordination. On the other hand, the supply chain challenges are highly related to relationships, planning and learning, depending on many other actors in order to be efficient in the field of operation. The key approach sustaining the model has being to create the ability of placing the empirical findings into relevant areas of analysis and into possible conclusions developing civil-military coordination.
3 Methodology

The aim of this chapter is to provide a description of the research approach, addressing the research questions, in order to achieve the main purpose of the thesis. A discussion about data collection and selected respondents is presented. The subject of validity and reliability has also been considered.

3.1 Research approach

This chapter refers to the techniques in which this research has been conducted and how the method conclusions and analyses based on the empirical background can support future suggestions. Based on earlier experiences from different researches, the case study interpretative approach is an appropriate method. This collects data link analysis from an actual situation into considered theoretical thought for future issues and is namely, the case study interpretative approach.

The intention of the use of methodology for this research is to structure, define and describe the complexity of coordination between military and civil governmental organizations in Sweden, when responding to humanitarian aid. That because Swedish organizations need to become more effective and through coordinating develop efficient operations.

Also, to explain how issues of best practices from the experiences in Haiti, can be useful to Swedish governmental organizations for introducing perspectives into future coordination of the logistics areas in disasters operations.

3.2 Inductive and interpretative analysis

According to Bryman (2007), inductive analysis involves a deductive element, since in practice the research method can develop and change during the course of investigation. The new element conform new theoretical ideas being found through the investigation process or as a result of data no fitting the original assumptions (Bryman, 2007).

Interpretative approaches for research, are relevant because they are gaining acceptance in the social and related sciences. Despite its wide recognition, and despite its successes in academic and other types of research, many theorists, methodologists, and empirical researches remain alert, considering this approach not sufficiently rigorous. The reasons on closer inspection, reveals theoretical and conceptual shortcomings of issues, which can be translated into either logical and procedural inconsistencies or diplomatic disregard of the guidelines outlined in the research methods literature (Bergman M, 2008).

The Interpretative case study approach is adequate for this research because it gathers the case study core issues into groups considered to be relevant, i.e. a mix of primary and secondary information, expert information, others and own experiences and imagination. Thus, this approach can be interpreted in a strong and weak sense. In an strong sense, sustained by different positions, addresses different research themes and questions in the data collection; and it demands different interpretation of the research results, which can be highly problematic, due to statements related to the research can be demonstratively incorrect, both in theory and application. Further, the weaker version invites research to re-examine the assumptions emphasized in the fundamentals of the literature. From the given arguments, it
must be concluded that interpretative research is unable to bridge incompatible positions in real life situations. Subsequently, whether research aims to transform existing inequalities or power imbalances depends on the aims and objectives of the researcher, nor on the particularities of data collection and analysis techniques (Bergman, 2012)

3.2.1 Information collection

The aim of this chapter is to present multiple sources of evidence strengthening with facts the case study, building in that way validity, since it is established that those case studies using multiple sources of evidence were rated highly, in terms of their overall quality, than those that relay in a single source of information (Yin, 2003).

The chart below, figure 6, attempts to visualize the methodological process used for this case study. Also, this chart is intended to structure data collection, through different sources of information with presenting civil-military governmental organizations in Sweden, in order to link experiences from the Haiti earthquake into best practices for Swedish organizations.

![Information Collection Chart](Arbnor, 2008)

**Primary sources**

Refers to the performed interviews with key experts within the topic of civil-military coordination (Yin, 2003). The interviews in this case study, were partly guided with questions in order to assist with specific information to the research questions, and also in order to provide an in depth perspective and knowledge. In open-ended interviews questions about the facts of coordination within their organizations and opinions about increased coordination, were discussed. The focused interviews were to respondents, during a short period of time, regarding a more rigid set of questions aiming to verify facts that I consider have already been established.

**Experiences and expertise**

Expertise interviews were, performed with key respondents in civil-military coordination field. Bout the experiences of from the Haiti earthquake and the Swedish coordination are
viewed from an expert horizon through written interviews. Among 5 of the requested interviews with experts, two of them did respond to the questionnaires becoming in that way part of the empirical base of this research. Those expertise’s are; from the Humanitarian Logistics and Supply Chain Research institute (HUMLOG) and The Griffith University of Australia (GUA) were performed,

Important experiences ensuring the quality of data in the case study, is an initiative taken; from representatives of academia, in Marsh, 2011, stakeholders from the humanitarian and military areas were invited, in a neutral “room”, at Pennsylvania State University, (PENNSTATE) into a discussion regarding “Improving of international logistics response to disaster operations” The Center for Supply Chain Research, at PENNSTATE, initial intention was to connect logisticians with expertise in international operations, to a discussion in which increased civil-military coordination was the objective. Thereafter, a formalized network or “e-community” was created to continue develop the initial discussions (ILOG, 2011).

Secondary sources
Secondary sources for this research had been data that easily be obtained. Secondary data through internet, libraries, institutions, companies and governmental agencies (Adams, 2007). For this study those frameworks collected regards, guidelines and policies strategies, and other regulation documents, governing and setting out the overall objectives for the coordination of humanitarian response. Other sources have been articles, historical documents, journals, books and statistics aimed to bring additional information into the research.

3.2.2 Creating; validity, reliability and quality

According to Yin (2003) case studies using multiple sources of evidence are rated highly, in terms in of an overall quality, than those cases that relay in a single source of information. (Yin, 2003). Therefore, constructing validity through the case study, strengths are basically the primary sources of information which stand for 23 interviews with experts and other professionals in the field. To conduct reliability, all respondents were phoned and received in advance a presentation of the case and formulary of questions.

The interviews from the Swedish respondents were planned to take 2 hours each; however, four of them were performed in less than two hours. The interviews were recorded electronically in Swedish and translated into English, so that the translation obtained is my interpretation of the answers. Further, all the interviews were also made in written form, to ensure the interviews were correctly noted.

Providing internal validity, respondents were carefully selected to conduct personal interviews. Among 23 of the respondents, six of the interviews, were targeted at civil and military experts with real life experiences. These were conducted with phone calls and e-mails interviews. Moreover, strengthening validity was an important advantage of conducting personal interviews, obtaining truthful information and increasing a mutual understanding of the items at issue. Respondents showed great flexibility under the discussion bringing different perspectives to the surface, in which additional aspects of interests were captured improving the quality of the study.

However, the weaknesses of the case study can also be considered. As to whether or not, it will be possible to match the theory with the empirical information and thereafter a conclusion helping organizations. Further, if the results from the analysis can be considered
applicable to reality, since there appears for some organizations, not to be an urgent need for coordination in Sweden.

A weakness of internal validity is that some of the respondents were not experts in the humanitarian field and may have provided general answers, not sufficiently specific regarding civil-military coordination, but with a wider approach. Nevertheless, the validity of the case study can be viewed as fairly approved, due to the complexity in considering profitable concepts guiding governmental organizations. Since governmental organizations are governed with political mandates and rigid budgets; in which no profit is expected as the output. Therefore it can be difficult to fully implement business concepts on governmental organizations.

3.3 Analyzing the information

This indicates the importance of analyzing the case study evidence; here, the challenge is being able to produce high-quality of analysis applying to all the evidence collected, and present the evidence separate from any interpretation. In view of this, there are some general strategies to consider; The first one is relaying on the theoretical propositions, by following the theoretical proposal, reflected research questions, and propositions shaping the data collection. A second general strategy is, thinking about rival explanations; which is that being aware of the direct rivals, in the case data collection should have included evidence about possible other influences. A third general strategy, is organizing a descriptive framework for organizing the case study, which is less preferable than the use of theoretical propositions (Yin, 2003).

3.4 Case study

Selecting a case study is the most suitable strategy for this thesis; It will attempt to bring a deeper understanding about the complexity of civil-military coordination in disaster operations, between governmental organizations in Sweden. This will be achieved by allowing, for the general features of real-life events experiences to be preserved, to be taken mainly from the Haiti earthquake. To clarify this point, here is the technical definition of a case study:

A case study is an empirical inquiry that; investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which single and multiple sources of evidence are used (Yin, 2003, p. 13).

The case study is one of several methods completing social sciences research and, in this research, consists of a detailed investigation of several organizations views and their conditions, about civil-military coordination singularity within disaster response. While this research is bringing experiences from the Haiti earthquake, to create criteria based on best practice issues; the question remaining is while, swedish governmental organizations are capable to coordinate and prepared for future disaster operations, or like the disaster magnitude that devastated Haiti.

3.4.1 The choise of the Haiti experiences

The Haiti disaster was selected as a case study; firstly, because it represented a disaster that has recently occurred and secondly, because Sweden has taken part in the disaster operation
by supporting in logistical areas. Therefore, it was considered relevant that the Swedish experiences from Haiti could contribute to the analysis in this research. The Swedish logistic challenges in Haiti operation according to The Swedish Civil Contingencies Agency (MSB) represented; transport of material to Port a Prince, as much as; (i) Boeing 747 (88 000 kg. camp material), (ii) C17 (92 000 kg. camp material) (iii) IL 76 (30 000 Kg Camp material), (iv) Boeing 737 (55 passenger), (v) Flight from Paris (1 ambulance), (vi) by vessel from South Hampton, (vii) (2 SVU TLC Land Cruiser), areas just to exemplify some of the logistical means.

3.4.2 Case study information collection

In order to arrange schedules and gain control on what respondents to interviews were supporting the case study with, a time schedule was prepared, aiming to charge the steps in the process of collecting data. See appendix 2, (schema of data collection).

Useful sources of evidence for this case study had been documentations, interviews, participant-observations, workshops, conferences, courses and field trips. Of importance to acknowledge is that there is not a single source of evidence that has a complete advantage over the other, but the various sources are highly complementary and a good case study will therefore want to use as many sources as possible (Yin, 2003).

Interviews

In view of this and in the interests of confidentiality, the answers will not be fully recorded to respondents or dates when reviewing the findings.

As there are 13 organizations involved in the discussions of this research, and bringing different inputs from different organizational levels. Among the 23 respondents interviewed under the interview process, establishing a strong empirical base, there are several national and international organizations represented. See appendix 3, (list of respondents) therefore, considered essential, was to keep track of different sets of interview questions, which were given in such a way that provided respondents with an opportunity to choose a desired level in which they comfortably could discuss their view points.

The data collection through interviews, is projected to be evaluated in four parallel levels; first step, is a set of general question intended to collect overall information from key respondents and issues in the case study. Step two, is the collection of data referring to the Haiti case directly connected with the experiences of crisis management, coordination implementation and evaluation of coordination between civil-military organizations. The third step refers to a set of questions aimed to collect data from the Swedish actors regarding needs and views of an increase civil-military coordination among governmental organizations. And the fourth step is a set of questions seeking for expertise views as contribution supporting the discussions of civil-military coordination in humanitarian operations. See, appendix 4, (interview questions)

3.4.3 Military organizations

In regard to the Swedish military organizations, personal interviews were carried out with represents from; the Swedish Armed Forces (SAF) and its supporting agencies which are responsible to implement The Governments instructions to achieve the best possible defense. The Swedish defense Material Administration (FMV), the Swedish defense Research Agency (FOI) and the National defense College (FHS) are supporting agencies to the SAF.
Further, supporting the collection of information, the earlier established point of contact at the U.S. Southern Command (SOUTHCOM), Chief, Joint Logistics Operations, was approached with interview questions, as a first step to building up empirical backgrounds regarding their participation in Haiti operations. The next step of contact with SOUTHCOM was aimed in approaching, suggested staff representatives conducting the joint logistics operation, and addressing the questions on the interview formulary. Further important documents addressing the SOUTHCOM lessons learned from the logistical operations in Haiti, were provided supporting this research.

3.4.4 Civilian organizations

Swedish governmental organizations which have a commitment to humanitarian work have provided opinions through personal interviews; the Swedish International Development Cooperation Agency, (SIDA), applies the humanitarian assistance policy in the implementation of its strategy and it is also required to assist the Government Offices with advocacy work. SIDA is further responsible for financial support to humanitarian assistance at country and regional level and responsible for funding activities of the Swedish Civil Contingencies Agency (MSB). The role of MSB and its responsibility is defined in its Letter of Instruction, to maintain preparedness supporting disaster operation in the field and strengthening early recovery. Those organizations, plays an important role in Sweden’s work with multilateral organizations and within the European Union (EU), and are required transferring on experiences and lessons learn to the Government for humanitarian policy development.

The Folket Bernadotte Academy (FBA) is responsible for developing knowledge, training, and dispatching of experts to peace efforts. Further, it also has a role as a national and international hub for collaboration between different agencies and organizations. As such, this organization has also provided views and opinions through personal interviews.

Thus, information supporting this research was also obtained by e-mail interviews and telephone discussions; with representatives from the World Food Program (WFP), as the global lead of logistics Cluster, WFP was responsible for ensuring well-coordinated, efficient and effective logistics response in Haiti not only bringing food, but also a larger humanitarian response. The Office for the Coordination of Humanitarian Affairs (OCHA) was replaying that to other contacts taking further interviews.

Other important providers of information in this case study had been key represents from; the Swedish Department of Defense, (DOD), responsible for proposing the work of achieving defense wherever it is needed; the Ministry of Foreign Affairs (MFA), responsible for the Swedish foreign policy towards other countries in the prevention of risk, threats and security issues.

3.4.5 Experts and practitioner and documentation

Significant information have being collected, by e-mail and telephone, from represents of; the Humanitarian Logistics and Supply Research Institute (HUMLOG), The Office for the Coordination of Humanitarian Affairs (OCHA), and Griffith University of Australia, (GUA) and the US Department of State, Office of Coordination, (US DOD).
Documentation is an important issue in this study topic, and implicit for this case study. Therefore, a list of the most relevant documents is presented demonstrating, views, of strengths and weaknesses that the documents represent in the purpose for governing Swedish governmental civil-military performances of the humanitarian tasks. See appendix 5. (important documents)
4 Empirical findings

This chapter will be presenting the findings of the case study. Firstly, it constitutes empirical findings from the Haiti earthquake. Secondly, the empirical findings from respondents among the Swedish governmental organizations, these findings will be consolidated into the theory areas, connecting in that way, to the research objectives and to obtain answers to the research questions.

4.1 Disposition of findings

The first part of the answers are aimed to describe the Haiti experience, one respondent states that:

*In the immediate aftermath of the earthquake that hit Haiti on 12 January 2010, the Joint Operations and Tasking Center was established by MINUSTAH, in coordination with OCHA and other key partners, as a civil-military coordination platform that ensured the most efficient and coordinated use of military, police and UN mission assets and enabled an effective information exchange among and between humanitarian, military and police actors* (an anonymous respondent)

Although, Haiti does not have a national army, there were a number of multinational troops deployed under a UN peacekeeping mandate, as well as other military forces deployed to Haiti under bilateral agreements including from the United States Southern Command (US SOUTCOM) among others:

*The deployment of the U.S military forces and U.S resources into the area of disaster was quick and effective, but not always efficient. The initial surge of forces and relief efforts was ad hoc because no single agency or organization exists with capacity to adequate respond to such an emergency. This effort was outside the formal U.S. military planning, sourcing, and tracking procedures, resulting in shortfalls in some areas. Because of the flexibility of military forces and rapid deployment of the DOD Global Response Force, Joint Task Force Haiti (JTF-H) helped avert a food and water crisis* (an anonymous respondent)

The second part of the answers corresponds to key staff officers at Swedish governmental organizations, involved in humanitarian and military tasks and processes, describing to a certain extent, the challenges and strengths for Sweden of coordinating disaster operations, as well as environmental threats and opportunities when humanitarians coordinate with military in disaster operations. Examples of answers confirming those statements are:

*Humanitarian actors in Sweden should be considering the opportunities for building trust and understanding with military actors, in flexible skills to increase effectiveness and/or efficiency and further seek other organizations with complementary capabilities. It is a matter of win-win situation* (an anonymous respondent)

Important to understand, is stated; that the legal instruments that specifically reinforce disaster operations in connection to natural disasters and other disasters situations differ in part from those that apply in the case of armed conflicts. However, overall the basic principles are the same. In specific, Sweden will attempt for full compliance with international humanitarian law, with the requirements of the humanitarian principles. Further:
All the authorities seem to be clear about their mandate and division of roles in the public network, but the view of how it actually works in reality differs, depending which authority you are representing. Military organizations should improve their knowledge and expertise to increase the impact and reduce duplication of effort when involved in civil-military coordination, therefore, it is important from a national economic view, to create a national coordination platform in which organizations by sharing information, develop skills and understanding for each other tasks (an anonymous respondent).

4.2 The Haiti Experience

The following section will briefly describe the antecedents devastating Haiti on 12 January 2010 and resulting from the earthquake, the international response that immediately merged on the only suitable airport capable of supporting an air relief operation. Due to the immediate aftermath of the earthquake, different forms of civil-military coordination were necessary. In this section, this study will therefore reinforce focus on discussions regarding, increased coordination, communication, roles, mandates, capabilities and limitations of the respective civil-military cultures, working together in the field of a disaster. The section is built up based on the information received from interviews with the US. Southern Command (SOUTHCOM) and the World Food Program, (WFP), Logistics Cluster-Port au Prince, important documents and information from the homepage of the Office for the Coordination of Humanitarian Affairs (OCHA) (www.unocha.org/search/node/haiti).

Background of Haiti

Haiti, due to its geographical location, is a country vulnerable to natural disasters facing the continuous risk of being struck by heavy rain, tropical storms and hurricanes. The leading and management of natural disaster belongs to the Government of Haiti. A deputy coordinator Humanitarian response leads the coordination with the United Nations (UN) system (OCHA, 2011).

Currently, Haiti is ranked 145 out of 169 on the Human Development Index, the population is 10.1 million, of which two million people were affected by the earthquake in 2010 and by the end of 2010, approximately 1.3 million people were displaced and spread out in more than 1,300 settlement cities. Therefore, this constituted a unique operational environment for the humanitarian police and military actors. Thereafter, a United Nations Stabilization Mission (MINUSTAH) was established in Haiti, 2004 following the UN Security Council (UNSC) Resolution 1542.

The military forces support relief and early humanitarian activities, by providing support to: the Haitian National Police (HNP), humanitarian agencies, particular regional areas, specific humanitarian sectors and logistics infrastructure amongst others. The implementation of activities by humanitarian actors and military and police actors, had required various forms of civil-military coordination, which involved increased coordination, communication and understanding of the respective working cultures, roles, mandates, capabilities, and limitations. (OCHA, 2010)
4.2.1 Civil-Military Coordination in Haiti – General Conditions

Responding to these questions respondents’ gave an uniformed view from both, WFP and SOUTHCOM pointed to the issues regarding attitude, commitment and communication at operational levels, highly impacting upon the success of civil-military coordination during the operations in Haiti.

Since the Haiti earthquake captured the immediate attention of leaders of nearby nations which resulted with the United States responding to the disaster in an (U.S) intensified state of urgency. This urgency leads to constant demands for detailed information at the operational level, which contributed with friction in the initial phrase, between SOUTHCOM and Joint Task Force -Haiti (JTF) headquarters. The most difficult challenge in the initial days of the response was to understand what the population needed. In the absence of defined requirements, SOUTHCOM leaders had to rely on their experience, intuition, and limited communication with those in Haiti to tailor available forces and deploy them as quickly as possible to Haiti. The military units prevented a complete disaster at the Port-au-Prince Airfield by bringing order to the chaos of arriving material and personnel, but it could not organize distribution inland from the port and airfield.

*One cannot effectively conduct humanitarian assistance or foreign disaster relief without working closely to the United Nations (UN) and the vast number of Non-Governmental Organizations (NGOs) that have been there several years. The agencies are crucial when it comes to humanitarian assistance and foreign disaster relief support, but they add complexity when it comes to governance and building host nation capacity (an anonymous respondent)*

Furthermore, respondents state that there are over 1000 NGOs working within the UN Office of Coordination of Humanitarian Assistance in Haiti. As the scouts and soldiers of the humanitarian effort, NGOs manage displaced persons camps, conduct food and shelter distributions, establish medical facilities, and deliver all types of relief. Whilst critical, their work should ultimately assist in building the capability of the government of Haiti to govern. Completing the answers a respondent argue that:

*Over the last two years, OCHA has been focusing on bringing in a wider range of partners from everywhere in the world to build new relationships and strengthen existing relationships, with governments, regional organizations, humanitarian response agencies, private companies, technology experts, civic groups, to ensure an effective response to the challenges ahead, this should be acknowledged more often (an anonymous respondent)*

In parallel, a Joint Operations and Tasking Center (JOTC) was established by MINUSTAH, and the WFP was requested to work alongside the military counterparts in the Haiti Flight Operations Coordination Centre (HFOCC) to manage the slots for and prioritize all humanitarian flights into Port-au-Prince (PaP). To create understanding, the JOTC organized regularly participants’ meetings during the first months after the earthquake providing necessary advice for the validation and prioritization of assistance requested from humanitarian agencies.
An exception to normal operations or “Last Resort”

Respondents from the civil side, referring to the United Nations Stabilization Mission in Haiti, (Nations, 2010) and especially regarding the military actors becoming increasingly involved in the provision of relief assistance in the outcome of a crisis, over the years, while the humanitarian drawing a key comparative advantage in the delivery of assistance in Haiti, could contribute to “blurring” of lines between military actors on one side, and humanitarian actors on the other, without impacting the operation decisively.

The great varieties of needs, required sufficient coordination with military forces as a last resort, and from an information practice perspective, the existing mechanism used by humanitarian and military organizations in the field of operation were authorized to work alongside the military during the second week of the response. Therefore, a timelier WFP presence is one of the key lessons learned derived from the experience (an anonymous respondent)

Civil-Military Coordination Guidelines are aimed to ensure adequate arrangements and safeguards humanitarian principles and actions. The guidance for civil-military engagement in Haiti is addressed by the United Nations Civil-Military Coordination (CMCoord) in natural disasters, including the use of military assets, armed escorts, joint humanitarian-military interventions and any other action involving visible interaction with military must be the option of a last resort and has a limited time and scale. A respondent further stated:

We should recognize the strategic luxury we enjoy. We live in a world in which we can employ (and if we are not careful, dissipate) our military capability providing foreign humanitarian assistance and disaster relief. Our leaders need to think hard before deciding to build specific capabilities for this purpose (an anonymous respondent)

The military respondents referred to the magnitude of the disaster in Haiti and the size of the response, as making response operation easier with unified response, which became an exception to normal military operations. The Department of Defense rarely responds to foreign disasters and when it does, the requirement is generally more manageable. Consequently, we must take care concerning the lessons we draw from this large-scale crisis. One could argue that structuring and organizing U.S. forces for humanitarian assistance and disaster relief does not make a great deal of sense, especially in the current environment of fiscal constraint and given the continued requirement to meet our enemies abroad.

A coordination platform at national level

These answers are in regard to the questions, and are from a civilian perspective; a consultative process was established among all actors, recognizing lower impact on the operation at this stage of emergency, ensuring the most efficient and coordinated use of military assets under the circumstances, and enabling information exchange among and between humanitarian, military and other actors in the field. Respondents argue that:

The creation of effective coordination mechanisms is the key on the field of operations. In ideal circumstances, a civilian-led coordination structure would exist in states and into which foreign military assets and international humanitarian actors could coordinate. However, sometimes it is difficult to implement these ahead of time. It is possible, though, to foresee the
need for dialogue and the value of that dialogue taking place ahead of time. This is both a way for actors to understand each other better and a way to plan without the distraction of exigent circumstances (an anonymous respondent)

The military respondents agreed that to coordinate and collaborate with non-military actors, demanded a great deal of shared information. Therefore, the military must earlier decide to be open and for communication and be transparent, but also understand that this measure had a lower impact on the operation at this point. Further, to enable this JFT-H operated open and unclassified systems and used commercially available programs to build up a platform with a common operational picture for the required humanitarian assistance at tactical level. Partner’s needed to be explicitly recognized, including national authorities, involved in humanitarian relief. Coordination was critical at the operational level. For instance, to achieve unity of effort it was necessary to use non-traditional methods; developing unclassified humanitarian assistance common operational picture platform with the available tools to share information.

**Importance of civil-military coordination**

Respondents’ answers stated; the importance of civil-military coordination, as crucial for the operation as whole; this recognizes that the need, for both humanitarian actors and military actors, to operate effectively within the same environment had a crucial impact under the operations. (i) the agreement of principles and practice for constructive civil-military relations, promoting the adherence to humanitarian principles of humanity, neutrality and impartiality and the independence of humanitarian action; (ii) avoiding duplication of tasks; (iii) to promote and strengthen coordination activities.

At all times, the WFP, ensured that the basic distinction between humanitarian and military actors was respected and the JTF planners and leaders worked alongside their counterparts, developing plans for moving internally displaced persons and mitigate the risks. Further, the answers from a military perspective related to command relationships established during the operation as crucial for its success. Operation Unified Response became an effective issue. Everyone remained focused on working to assist the Haitian people, and we achieved unity of effort. However, as in all operations, achieving a correct command and control relationship was difficult and a different personal dynamic could have caused friction due to organizational chart challenges. The more we define relationships along doctrinal lines, the better they work. Respondents stated:

*We must think differently about how Joint task forces support humanitarian operations. The JTF headquarters must be focused and resourced to command and control logistics functions. This capability must be more robust than the capability normally found in a maneuver-centric Joint task force J-4 section designed to sustain the force (an anonymous respondent)*

**Recognizing the need of coordinated civil-military actors**

As responding to these questions and from a civil perspective was the acceptance for the requirement of civil-military actors coordinating a crucial strategy in Haiti, in which partners agreed to work together, particularly when regarding Haiti’s extreme vulnerability and instability at the time of the disaster. Civil-military coordination was and continues to be required with all actors on the ground. In particular, civil military coordination in Haiti still focuses on improving the effectiveness and efficiently of the combined efforts to serve
humanitarian objectives, as well as early recovery and reconstruction efforts. To date, the presence in Haiti of civil-military coordination platforms ensures that tasks and responsibilities between civil-military and other actors are clearly defined.

**OCHA will continue to push for enhanced coordination everywhere is needed, particularly at the local level. Improve coordination will be complemented by more effective information sharing. Access to better data and analysis will lend more conviction to our advocacy as we highlight needs and priorities, and will help ensure humanitarian financing mechanisms are accountable and effective (an anonymous respondent).**

The military perspective from respondents of the interviews is recognizing the need of civil-military coordination, as crucial during the operation as motivated by seriousness of the tragedy in Haiti; the immediate requirement was for planning and executing logistics operations in concert with humanitarian agencies the World Food Program. Relief supplies pre-staged in World Food Program warehouses or coming through Port-au-Prince which had to be organized into correctly sized packages for onward movement to distribution points.

Logistics planning was also required for medical and engineering operations and reception, staging, and force sustainment considerations for deploying U.S. forces and relief supplies. In a perfect world, a logistics unit with this capability would have been the first to deploy. As noted, security concerns and physical limitations for force reception precluded this approach in Haiti, and the force required was not available or ready for expeditionary operations. Post-deployment dwell time concerns raised availability issues. Soldiers motivated to deploy manned both units, but neither unit was deployable or expeditionary.

### 4.2.2 Civil-military coordination of logistics in Haiti

Responding to these questions, from a civilian perspective, WFP as the global agency for two main clusters; Emergency Telecommunications (ETC), and the Logistics Cluster, quickly activated the logistics cluster taking the lead in the implementation of logistical operations in the area of disasters. Due to the magnitude of the damage caused by the earthquake, a humanitarian response of a logistical character was required. Major intensification of the logistics supply chain and assets as well as the coordination of the overall response were activated by WFP. This was not able to ensure effective and efficient logistics operations, because logistics came into the emergency very early, and the established structure has to quickly reorganize a more effective operations and coordination at multiple locations with new actors.

While the WFP was reorganizing and coordinating with representatives from other deployed forces and providing necessary advice for the validation and prioritization of the assistance requested; from the military point of view, the most fundamental demand at this moment was to respond quickly and effectively as possible, because of the crucial impact on the operation. Respondents argue that:

*In a perfect world, a logistics unit with this capability would have been the first to deploy. As noted, security concerns and physical limitations for force reception precluded this approach in Haiti, and the force required was not available or ready for expeditionary operations. Post-deployment dwell time concerns raised availability issues, and the 377th TSC reserve*
unit had unique activation concerns. Soldiers motivated to deploy manned both units, but neither unit was deployable or expeditionary (an anonymous respondent)

Further, respondents stated that the rapid deployment of the US military forces and resources was quick and effective but not always efficient. The initial surge of forces and relief efforts was ad hoc because no single agency or organization exists with the capacity to adequately respond to such an emergency. Considering this effort being outside the US military planning, sourcing, and tracing procedures, resulted in shortfalls in some areas. The most significant challenge facing the US military and the humanitarian community in the initial phase of the disaster was logistics.

**Effective logistics for disaster operations**

In answer to this, the civil respondents considered the immediate requests for logistics as the most crucial issue under the whole operation in Haiti Transportation of cargo, the encompassing of activities, including preparedness, planning, procurement, warehousing tracking and finding assets, and also customs and clearance; was highly prioritized and submitted via WFP/Logistics Cluster. The arrangements also included, requests for assistance directed to other deployed forces (non-UN). WFP’s presence in the HFOCC improved synchronization of civil-military aviation operations in support of humanitarian assistance. Indeed, WFP driven by the urgency of the needs the high level of uncertainty because of the magnitude of the catastrophe, all processes were focus on speed in which costs did not matter. Completing the argument respondents said:

*Respondents of the 2010 Haiti Earthquake lessons learned, reported excellent performance by WFP logistics, in part because Logistics” came into the emergency with a clearly-established organizational structure right from the beginning (an anonymous respondent)*

The logisticians on the military side, responding to the same questions, stated that logistics impacting the planning was based on requirements, but since the absence of requirements was a fact; the commander did not know what capabilities were needed to be planned in response to the operation. The majority of requests for information were focused on comparing requirements with capabilities. Early challenges of establishing information were the result of chaos and uncertainty. At first, communications between the forming JTF and the rest of the world were limited to a Blackberry-based cell phone network. The communications situation improved over time, as did Joint Task Force Haiti's ability to determine its requirements and daily activities. Respondents agreed that:

*The efficacy of a Joint functional component command for logistics continues to be a question pondered in the Joint logistics community. Current doctrine provides for this option as well as the more traditional approach of logistics as a service responsibility. In Haiti, as in all humanitarian and disaster relief operations, the question has two dimensions- logistics support to the affected population and logistics sustainment to the deployed force (an anonymous respondent)*

However, the default communications medium remained PowerPoint briefs, which were laborious to build and maintain on the fly. The efficacy of a Joint functional component command for logistics continues to be a question pondered in the Joint logistics community.
Logistics and the emergency telecommunications

Respondents to these questions are unanimous about the crucial impact that information had on the logistics response and the great importance of telecommunication under the operation, arguing that:

*Lessons learned encourages OCHA to make more of the technology and social media available, which can have a striking impact on fast humanitarian action. In Haiti, people were pulled from the rubble on the strength of a geo-located text message. There are numerous other opportunities. Real-time maps can be drawn on basis of crowd-sourcing, SMS text messaging (an anonymous respondent)*

Information Sharing was a critical element for civil-military coordination. In order to ensure that relevant stakeholders were informed of each other’s mandates, roles, and activities; and avoiding duplication of efforts, the importance of the communication system was major factor. The military respondents are advocating that in the current time, we should be ready for developing a system to capture and display a common operational picture for logistics. Furthermore, this incorporates information from all participants in an operation, since this became an obvious obstacle during the operation in Haiti. ‘We must be able to access strategic and tactical information and precise information on logistics requirements. Effectiveness and efficiency literally save lives’ *(an anonymous respondent)*

4.2.3 Performance evaluation of the Haiti Disaster operations

Responding to these questions, different aspects were presented as the result of several evaluations at different levels of the civil-military organizations; those evaluations were not decisive under the operation due to time pressures not being able to evaluate under the operation. But evaluations became highly important immediately after the worse time had passed. Some of the most important issues in the answers from the military side regards to, information flow, up to the chain to the various decision makers, as very important.

Respondents add, however, that requests from data from senior levels require to be managed so as not to interfere with those working in response to the crisis. On many occasions senior leaders have an unquenchable thirst for information and that requirement of reports, briefs and data turns into a substantial workload for those working in responding to the crisis. And that senior leaders need to be aware of this type of workload so those engaged with responding to the crisis can focus downward on the task at hand. Military staff involved with responding, agreed with the above viewpoint, regarding decisions made within the military chain of command. In contrast, the strengths are considered to be that the leadership is centralized and decisions can be made up and down the leadership chain very quickly.

Respondents concluded that the weaknesses were, however, the difficulties in communicating laterally to organizations outside the military chain of command. Important recognition among respondents is the need of a process in place to conduct coordination with key stakeholders in the area of operations. SOUTHCOM gained tremendous experience from supporting the Haiti earthquake relief operation. Many of the processes developed to support Haiti turned into best practices that are currently used today. Further issues are; establishing points of contacts, work to improve communications and understanding of humanitarian process; respondent further argue:
Obviously, we have more work to do to define the command and control structure. Unity of effort and unity of command are both important considerations. TRANSCOM's JTF-PO is designed to achieve unity of effort, through a "coordinating" relationship with the combatant commander, but it is not set up to achieve unity of command, which requires a tactical control relationship with the JTF or functional logistics component, if established. We must consider these relationships as well as those among critical logistics organization (an anonymous respondent).

Answers from the WFP associated to a lesson learnt exercise in 2010 after the emergency operation including evaluation of civil-military coordination in Haiti. Detailed findings on WFP coordination with military actors, primary US military were discussed. Survey respondents identified close coordination with SOUTHCOM as critical determinant of success for the WFP operation in Haiti. Moreover respondents:

In terms of best practices, respondents ensure, the creation of effective coordination mechanism in Haiti as central element to ensure civil-military relations. In addition dialog and relationship-building before, during, and after the crisis is vital to build mutual understanding and respect (an anonymous respondent).

Respondents suggested a corporate framework for WFP civil-military coordination that would ensure lessons from the field, and integrated to WFP planning upon future emergencies. Similarly, shared learning including through joint reviews, evaluations, and simulation exercises could be a way forward, but in terms of improving civil-military relations and of the effectiveness of humanitarian efforts on all sides. As concrete results are added, the endorsement by the Humanitarian Coordinator of Civil-Military Guidelines specific to Haiti, aim to help interaction between civil and military (Haiti, 2011).

4.3 About Swedish Govermental Organizations

Before going into the interviews findings about the Swedish civil military coordination in disaster operations, I will briefly describe the governing model of Sweden accessible in the homepage of the Swedish Government (www.sweden.gov.se) The Swedish model is organized in three levels; national, regional and local. For this case study, only the national level will be approached including a number of ministers, and a number of governmental agencies and public administrations, performing also at the European level; which regards Sweden as member state since 1995, to be subject to the EU directives, and taking part in decision making. Central government agencies and state-owned companies in Sweden are responsible to the Government in which ministries acts as principal with a main function to implement decisions taken by the Parliament and the Government; those agencies are autonomous which means, they operate independently through guidelines drawn by the government. Of importance for this case study, the following will shortly describe, how responsibilities for Crisis Management issues are divided among the Swedish Government Offices; the government is responsible for crisis management strategic matters while practical work lies on the governmental agencies. There are three ministries responsible for emergencies in their own policy areas, while the Crisis management coordination secretariat is responsible for coordination and support; an overall picture of the situation and joint overall analysis, each minister has an crisis management plan and a crisis management organization. Each minister must therefore have an official standby in each case.
4.3.1 Civil-military coordination in Sweden

Among the 23 respondents taking part in interviews for this case study, 15 of them remain as key staff representatives from the Swedish governmental organizations. Information given by respondents states that:

The ministry of Defense has the overall political responsibility for the coordination of the emergency planning insuring that the Swedish government offices have the necessary coordinated skills to handle emergencies when they occur (an anonymous respondent)

Regarding answers about conditions of crucial impact for civil-military coordination in Sweden, respondents referred to a previous organization in Sweden with conditions for national and international coordination that was successively reduced. However, recently there have been new trends in building up an infrastructure for coordinating between agencies and authorities again. Interestingly, however, is that the SAF in their plan has ambitions to increase coordination with other agencies on a national level. While MSB and other humanitarian organizations, wish to ensure further, the need of coordination on an international basis under international rules. This is representing a lack of clear political strategy in which governmental organizations rely upon conducing coordination, highly affecting the operational efficiency, not least in disaster planning and performing.

Furthermore, coordination is neutralized because of the “trust” issue and the lack of clear tasks which mean that there is a need of higher level of trust and confidence for the SAF from the political levels. Additional comments are as the following; to facilitate coordination in Sweden requires a better understanding of each other, available information about organizations contact points and tasks areas, and also organizations beneficial approach to the SAF. It is also of essential character, a common information system in common IT environment, with a wide system forum in which all actors can exchange daily information with each other. Respondents concluded that:

Effective communication between civil-military authorities and other organizations is vital to develop trust and common understanding. The civilian-military actors need to exchange information about the humanitarian needs and the military and political situations. Different kinds of actors also must have access to different sorts of information (an anonymous respondent)

Moreover, respondents assume that some of the obstacles to civil-military coordination in Sweden are constituted in parts of the “Oslo Guide Lines”. Here, the MFA refers to a point, as the regulator for the amount of Swedish military assets deployed in disaster operations; this means a slightly different approach from DOD approach, which do not see “Oslo Guidelines” as a body of governance, but as guideline merely. Oslo Guide Lines refers to price and finance not being a motive to enhance civil-military coordination. This seems to represent a tasking conflict between MFA and DOD in the humanitarian field, concerning the background of “Oslo Guide Lines” on how the money will be used. Respondents concluded that:

OCHA’s Civil-Military Coordination Section (CMCS) offers training to military and civilian actors in civil-military coordination, and some of the agencies have built up teams of personal experienced in networking with military personnel, also there is an integrated mechanism for coordination that Sweden can use in greater extend (an anonymous respondent)
Respondents stated that there is no a principal resistance to the use of military assets in disaster operations, from a Swedish viewpoint, coordination in those cases is less sensitive but is about cost efficiency and the operations effectiveness. Furthermore, due to the governmental increased demands for effective and efficient performance of tasks, on organizations, it therefore, becomes automatically in most cases the civil solution as being more cost effective, than using the military solution.

There is also a concern of using military assets which are fairly spread out, because the military have expensive resources and available equipment to their use, while the humanitarian rationale is based on needs and solutions in the most economical way. However, in some situations and when appropriate, the use of military assets for humanitarian operations can be motivated independently of the cost. Respondents arguing this issue stated: the SAF has been cut out, for interference in humanitarian operations, relatively hard, because of it has been interpreted as a costly recourse. This is obviously wrong, since the government has already invested in resources and materials, which from a national economics perspective is not a loss. Yet costs arise when the SAF has to build capacity which they are not able to use in reality. Therefore, from an effective use of the Swedish resources, the SAF would in practice be able to use their resources in training and learning by exercising in humanitarian operations.

An exception to normal operation or “Last Resort”

Regarding these questions, respondents linking the answers to the Swedish Policy for Humanitarian Assistance which establishes the government overall goal for Swedish humanitarian assistance, including three main areas; (i) rapid, flexible and effective humanitarian response for humanitarian needs, (ii) strong and coordinated international humanitarian system and (iii) improve interaction with development assistance and with other types of interventions and actors; adding, that military should be a form of backup when civilian resources are ended, and therefore conducted on a case by case basis, as a last resort. There seems to be no reason, respondents’ state that SIDA and MSB binds up closely to the SAF, in preliminary contracts. Nevertheless, if this is the case it must be completed on the basis of, case by case; which means that there is no need for civil-military coordination in Sweden. Respondents further argue that:


It is a matter of a common interpretation of the “last resource” issue in a functional long term perspective if there is meant to have crucial impact in future disaster operations. It is also, a great responsibility, considering the magnitude of some of the disaster operations, which would lead to a situation of uncontrolled commitments without capacity to be, meet (an anonymous respondent)

Presently, the efficiency issue is particularly important, when the SAF is employing over 1000 professional soldiers that can be also commanded to participate in disaster exercising, and support to humanitarian operations, not implementing this would be of great efficiency and effectiveness mistake. Respondent said that:

It is really more about a morality issue; bureaucracy should not become more important than saving of lives in an effective way (an anonymous respondent)
Recognizing the need of coordinated civil-military actors

The view about civil-military coordination in disaster operations in Sweden is supported by 5 of the respondents arguing on crucial impacts for organizations operational cost efficiency; supported by The Swedish National Audit Office (RiR) review from 2011:15; stating that; to date, the Swedish Armed Forces (SAF) constitutes an ambiguous resource, due to Swedish municipalities and counties not having knowledge of what the SAF can offer in the event of a crisis. This explanation combines to make a very serious argument, considering the risk to other people in Sweden, when reducing the SAF as a support resource, and a risk of creating an over-belief on the SAF as support in crisis. An unclear image of the SAF can therefore mean that the country’s resources are not effectively exploited, and that it can also create gaps in emergency preparedness. (Riksrevisionen, 2011)

Respondents argued that coordination must be based on specific needs in which all partners benefit from coordination in different situations, convinced that coordination must start at a strategic level and at governmental level. This becomes clear when there is a plan to implement forward at the operational level; and the organization’s involvement is clear as defined in their regulations and tasking. The common denominator in the answers received, moved the discussion into money and resource issues at the operational level, indicating that at this moment the military are not really adapted to a humanitarian response, because they are missing a direct role in its scope of tasks. Respondents said that:

The latest changes, impacting the SAF capabilities can even be recognized to assist humanitarian needs, in Sweden and in other countries, by creating a modern mission-based unit with focus to deploy directly were they are needed, the SAF becomes in that way an interesting actor for disasters response (an anonymous respondent)

Stressing other arguments, the rest of the respondents are concerned of the importance of; making a distinction between emergency relief, and the national humanitarian funding for which are financed by aid funds. Here, The Swedish International Development Cooperation Agency (SIDA) in consultation with Foreign Ministry decides Swedish participation in each emergency situation, performed through the Swedish Civil Contingency Agency (MSB). Sweden does not take national decisions about taking part in a disaster operation without looking at the needs assessment before, and then looking into what Sweden can assist with. These aspects are governed through the Strategy for Humanitarian Assistance 2011-2012 provided by respondents (SIDA, 2011).

Further, SIDA does not want to act on behalf of the SAF because of a lack of trust, creating great frustration on the SAF in missing the point of business opportunities and higher efficiency. For instance, an example mentioned is that if the SAF, thought FMV, have MSB in some contracts, would this contribute to better business for the state. However, on the other hand, MSB has sometimes made use of the SAF aircraft without in any way increasing efficiency for the state. In contrast, formalizing civil-military coordination is very rare in reality the only time coordination has happened is in Afghanistan, peacekeeping operations, in which SAF had soldiers in the field of operation under longer time period. Indeed, Sweden has very little experience of coordinating in humanitarian responses. Respondents argue that:

Civil-military coordination today is carried out at administrative levels and in ad hoc planning of international activities, training and exercises. In Sweden MSB and SAF
headquarters coordinate civil-military activities at units’ lower levels. Military organizations will support civilian authorities during disaster operations, which emphasizes the need for efficient resource utilization and the insurance of and strategically coordinate response as very important (an anonymous respondent)

A coordination platform at the national level

Answers to these questions, suggest that civil-military coordination could be performed by SAF and the DOD and MSB. Presently, there is no great coordination among governmental organizations in general, because of the lack of communication with each other and choosing to work separately, often with the same issues. There is no a natural way or platform to meet and discuss issues across organizational boundaries. This issue according to respondents; represents considerable impact on the organizational levels planning for disaster operations. It appears many lessons can be learnt from Haiti, since there, the military were needed and could therefore represent an important role in the support of humanitarian operations. The next step for Sweden would be to create a joint venture with SAF, MSB, FMV, FHS and other actors in the governmental group, to bring discussions on the effective use of resources in a civil-military coordination platform. Respondent concluded that:

It should be possible to develop a national coordination strategy, providing a platform for Swedish organizations to unified competences, knowledge, information and experiences into a national capability responding to disaster and planning for future response (an anonymous respondent)

In addition, respondents indicated that several discussions, about the interpretation of the military aid in humanitarian coordination had been performed at the DOD; concluding that difficulties were experienced regarding to history and the humanitarian concerns based on the ‘Oslo Guidelines’. This means that efficiency will still be maintained regardless of principles. Besides, the ‘Oslo Guide Lines’ did not represent a problem in the Haiti operation, so why should they become an issue for Swedish coordination? The answer to that question, is in regards; to the reason for at MSB belongs to the DOD is because the Swedish government want to build up competence for humanitarian efforts. This provides a way to make governmental organizations coordinate with each other by creating a common platform and information sharing. Further, it is argued that; still remaining and most important for coordination, is that the given tasks to governmental organizations, must not be split in different directions, with unclear descriptions of non-financed issues of coordination and either become detailed driven, but to use organizations resources more efficiently and effectively.

Respondents argue that; more formalized civil-military coordination at national level will need a common platform for discussions. Nevertheless, the cost effectiveness argument in this case, will be the main option to formalized civil-military coordination. A Paradox is that expensive Swedish assets in humanitarian operations and are not considered cost effective for humanitarian operations. Thus greater civil-military coordination requires to be managed by humanitarian organizations, since they seem to be able to achieve cost effective, operations and have a greater control of the supplies needed in operations, something for the military to learn if they seek to slimed supply chain.
**Importance of civil - military coordination**

Respondents in these questions are concerning guidelines and policies strongly highlighting the crucial importance of coordinating in logistics. This indicates that by governing logistical operations and coordinating solutions to logistics support will reduce cost and achieve economies of scale. Therefore encouraging organizations to develop arrangements for coordinating national support of logistics so that humanitarian needs becomes of crucial importance from efficiency view point. Respondent takes this up:

*Logistics in disaster response has the same conflicting interests of stakeholders and some of the needs as the military logistics have. Basically is about the same reasoning and about been cost efficient, so why no to coordinate? (An anonymous respondent)*

Moreover, respondents stated; the SAF are developing mechanisms for supporting other organizations needs of logistics and in that way make use of the national resources to maximum, some of the areas are such; medical equipment trauma, helicopters, materiel procurement, and also cooperation in terms of air transportation using the C17. Further, SAF should be able to emphases into supporting civil society in greater extent, whether at national level or outside the country and that sense is logistics crucial parameter to perform coordination at any level.

**4.3.2 Civil-military coordination of logistics in Sweden**

Here, respondents argue that there are political choices preventing SAF from various logistics coordination occasions which could improve coordination as whole, such as; transportation and ambulance service, but SAF interacts with other actors, anyway, due to the bilateral coordination with MSB participating in field exercises and taking measures to improve logistics processes and utilization of materiel and logistics services, and in that way also simplifying and streamlining the logistical flows by reducing the number of actors in the operations.

Respondents further argue, relief efforts, whether under disaster operations or aftermath of natural disaster, are dependent on the efficient procurement of right supplies, whether by land, air or sea, and the storage of good security, so that they can be hand to people whenever they need; therefore, a greater coordination and learning are crucial elements not only for governmental organizations but all other actors working in the area of humanitarian; also logistics has the potential to enhance the success of coordination and greatly increase the efficiency of operations. Otherwise, respondents refer to humanitarian organizations avoiding becoming dependent on resources or support provided by military organizations, and if such, it should be at its beginning, and clearly limited in time and scale with an exit strategy defining how the functions can be taken by civilian personnel. Respondents argued that:

*Military policies and doctrines had been, lately, developed for the provision of aid by military; however the involvement of military in humanitarian operations implicates many challenges, such different organizational cultures. But the CIMIC has grown in importance within the military as a necessary tool to assist among others, logistics coordination by integrating diverse elements in peaceful operations (an anonymous respondent)*
Effective logistics for disaster operations

Answering these questions and highlighting the challenges of logistics in disaster operations, respondents, argue that crucial for the operations is the need of mapping the humanitarian logistics needs in processes, as well as the layers of technology with training stressing the processes, in order to increase expertise in this field. Accordingly, without a professional frame, in which coordination and practice become the impact, it will challenge logisticians to be able to communicate their impact in strategic terms, and the effectiveness will remain underdeveloped. Argued further, was that, logistics must be coordinated assisting as a bridge between disaster preparedness and response, through the creation of effective procurement procedures, supplier relationships, prepositioned stocks and knowledge of local transport conditions. Respondent said:

In that way, it could be possible for FMV to support the SAF, and if the Swedish government decides to use FMV in a wider concept from a material supply perspective by actually supporting other governmental organizations with their material supply (an anonymous respondent)

FMV owns considerable resources and expertise able to support humanitarian organizations with their supply of material. It is about identifying new trends for improving civil-military coordination of logistics for the disaster needs, by measuring and communicating, the impact of logistics within and across the organizations.

Logistics and the emergency of telecommunications

These questions were approached by respondents, as decisive impacting disaster operations, and in terms of information sharing within the mandate for humanitarian organizations by restricting the sharing of information, gathered for humanitarian purposes, and the risks of compromising impartiality and neutrality. However, to provide protection and assistance to people, information sharing with the military forces may at times become necessary. Information sharing between civil-military actors should include; (i) security information relevant for the security of civilians in the area of operation, (ii) relief activities of the military, and (iii) major population movements. Respondents conclude:

A main obstacle to deliver aid is poor communication; military forces however, can supply specialized capabilities such as communication equipment and information technology being the completing of correct assessment in a disaster operation were functional communications play a decisive role (an anonymous respondent)

Respondents also indicated the importance of having a system wide information in Sweden, in which MSB and the SAF can share information, by increasing the currently limited use of RAKEL system among the SAF, and impacting in that way the logistical decision making and planning for disaster operations, such as information regarding; plans, intentions, including routs and timing of humanitarian convoys and air lifts in order to coordinate planned operations, or to warn of any conflicting activities. Most important becomes communication in logistics operations at levels of the operation, because many organizations within the field of operation will require data to plan and perform their assignment. All of the respondents, secure the importance of assure reliable information.
4.3.3 Performance evaluation from a Swedish view

Respondents stated that there had been several follow-ups but those were very weak and above all, no actions were made. This is an important area that has decisive impact on future decision making and quality of disaster operations. Lack of consistency in the implementation of gained experiences had depended on the fast rotation of key staff members, responsible for the development of the units at organizations. SAF at their respective headquarters has a “Lessons Learn” function been set up and it would be good if all the governmental organizations could implement the same set up. Respondent further argues:

*One of the obstacles in taking actions from experiences is the fear of criticism, as in the “Blame Game”, and thus being criticized, acts against with that of coordination, indeed, after the tsunami in Thailand, many mistakes were made and evaluated, resulting in new structures”* added respondent (an anonymous respondent)

Respondents confirm that; there have been studies in Sweden about the required response in the event of a technological, nuclear or environmental emergency; in these cases the SAF becomes a great resource, but it will demand joint exercises on a large scale, in coordination with civil organizations. Finally, respondent’s views indicate that evaluation afterwards or possibly under the operations will encourage adjusting behaviors and taking advantages by adapting the actions with changes in operations.

Respondents say that; several governmental organizations with the task to coordinate governmental organizations, are still no having clear specification nor conditions to perform coordination; such is the case for MSB, FOI, FBA, and also FHS regarding educational programs for civil safety and security. This absence of clear mandate to organizations make almost impossible for organizations to develop an overall picture of the governmental need of joint issues and difficult to move from text to action in a proactive discussion about coordination.

*Evaluated should be; the counterparts’ adherence to humanitarian principles (incl. that of neutrality – though to which degree this is of importance depends on the organization) and/or a neutral party that coordinates them all. An issue at hand (a bottleneck, an area to access etc.) that triggers the need for coordination, and the counterparts’ ability to address this issue (or address the issue together) The importance to hand over operations in the long run to an in-country coordinating body – which speaks for national/regional governmental bodies to coordinate relief efforts* (an anonymous respondent)
5 Analysis

This chapter will review the analysis of the case study. The findings from the empirical study will link to the analysis framework, referring to the issues of; the choice to coordinate, civil-military coordination in disaster operations, civil-military coordination of logistics and the performance evaluation.

5.1 Analysis framework

The concept of coordination is a complex issue; therefore, the purpose of this thesis has been to give a contribution to the research about civil-military coordination from a Swedish governmental organizations perspective. The empirical study shows understanding of the concept that can differ depending on the environmental perception from respondents. The analysis, at the first stage, regards mapping the identified areas of coordination in which structure for discussing; strengths and weaknesses as well as opportunities and threats will be the foundation of this analysis. Also, the discussion relating to a suitable strategic plan and the type of relationships through the learning supply chains; will answer the research questions. By supporting discussions with the reviewed theory and the findings from interviews; the grounds for the analysis will strengthen further conclusions and implications, in a second stage.

![Theoretical Framework](image)

**Figure**: 5.7: Modified Coordination Model, adopted from *(Overstreet, 2011)*, reconstructed by the author

5.2 The choice to coordinate

Summing up respondents views about coordination, the potential and challenges of coordination, can be explained by the following; horizontally, by looking at organizations internal strengths and weaknesses for a competitive advantage of identified areas that needs to be changed; and vertically, by looking at the external environment focusing on the needs and
performances, seeking for identification of opportunities and threats, to meet the changing nature of natural disasters. Further, having decided to coordinate, organizations have to discuss the design of the relationship. This may conclude on an agreement binding the two fundamental differences in terms of principles and doctrines regulating their work, agendas, operating styles and roles of organizations. Also, because of the autonomy of governmental authorities, this means as such, governmental authorities are not dependent on any other organizations and thus implicates difficulties for those organizations that wish to coordinate.

One of the problems of coordination, among Swedish governmental organizations, seems to be defining at what organizational level coordination should start. Efficiency and effectiveness requirements regulated by tight budgets make it difficult for governmental organizations to explain how civil-military coordination could be linked to business with profit objectives. There are however, different types of flows in humanitarian supply chains important to mention that are not only related to the objective of profit. These flows are of equal importance and present a challenge for managers in the humanitarian sphere; since disruption in one of flows can have an effect on the remaining areas with serious and expensive consequences (Tomasini, 2009). Therefore, the key issue here is for Swedish organizations, is to be able to combine humanitarian flows into execution plans, ensuring national efficiency and effectiveness, when producing the adequate response to a disaster. Further, this issue is commented upon, with the need for coordination stemming from shortages, limited capacities, and/or bottlenecks, which is why coordination is mostly needed to address the problem at hand. The only coordination that is a given is that with governmental bodies in the disaster area (except in the case when there is no government).

Supporting the purpose of this research; which is contributing to a more in depth study of civil-military coordination in disaster operations, is an analysis on the coordination challenges among Swedish governmental organizations. This will present the main strengths and weaknesses that Swedish governmental organizations are facing, from the views of key staff representatives and support of the theoretical backgrounds earlier presented. Further, the analysis will help to identify opportunities and threats from humanitarian operational environments, based on respondents’ views that illustrate important areas that Swedish organizations need to develop in order to become competitive in humanitarian work.

In addition, to bring answers to the research questions, an analysis focused upon the questions main issues, supported by the empirical finding and theory, will not only try to address answers to Swedish governmental organizations. However, this will contribute to future development of a more efficient and effective civil-military coordination in disaster operations.

5.3 Conditions for coordination in disaster operations

Although, there is not a proposal for civil-military coordination in Sweden, the logic of coordination structure should lead in the first place, to a higher efficiency and for greater potential of obtaining competitive advantages; Gourlay (2000), states that a hopeful way forward is to adopt models for coordination between the military and civilian actors. Those models help synchronizing skills from previous operations, into developed specifications and increased understanding of potential conflicts in the processes of coordination. This would also include procedures added to increase coordination (Gourlay, 2000). Sweden has a well-established framework that rules and regulates conditions in which the humanitarian assistance is to be performed and it is linked to the international legal instruments. Yet, for the
national humanitarian work, is the question of interpretation and use of guidelines regulating coordination constituting a political issue.

With the background of the views from people at Swedish governmental organizations, there are general conditions for civil-military coordination, which needs to be synchronized. This shows areas of organizational strengths and weaknesses as well as environmental opportunities and threats for coordination. The issues are further analyzed supported by the research theory and the views from respondents. Still, deductions in the analysis are in partly based on best practices from Haiti coordination which are not comparable to a Swedish environment. This is limiting to the discussion as a whole, since the experiences of Haiti are based upon an extreme situation.

**Strengths and weaknesses**

Several respondents suggested areas in which the unclear mandate to organizations is causing unnecessary duplication of skills, products and systems in expensive processes to the cost of tax payers. Swedish organizations, also are proposing the need of a coordination mechanism adaptable for the Swedish needs. This would involve a more effective diversity of means and knowledge; of transport, manpower, machines, technical skills, and security that can be achieved. Relevant to this issue, is the respondents view that what Sweden needs right now, is to synchronize inter-organizational operational and strategic capabilities into a unified coordination force. This would include not only logistics, but also all the functions within governmental organizations and within supply chains. This will create value of effectiveness in planning future disaster operations and also creating value of efficiency in the way of conducting business in profitable solutions and within this context, would create improved understanding for humanitarian values and requirements.

Therefore, these arguments suggest that; Swedish governmental organizations will still have to develop their tasks of responsibilities in a wider humanitarian improvement context. Moreover, even if the time-frames in which the Haiti coordination was developed, limits the contribution of major lessons about civil-military coordination, the Haiti experiences may still be useful for the developing of a framework. However, this would be adapted to Swedish governmental organizations. Consequently, the Swedish humanitarian objective can be achieved regarding civil-military coordination, if it can be shown that a combined provision of rapid and flexible support to humanitarian operations can ensure higher quality. And also if it improved leadership and relationships increasing the disaster work performance effectiveness.

Perhaps the best way to start is with the existing international coordinating bodies, e.g. the clusters. Nevertheless, it can be argued that any of the international defense bodies “cluster leads” that work as coordinators are appropriate as coordination partners for Sweden, but this will depend on the issues and materials at hand. Barber (2208), discusses, however, mandates as often a compromise creating uncertainty which leads to different interpretations of tasks by actors in disaster support areas. Nonetheless, the latest mandate to the military forces includes dedication in warfare and peace keeping operations (Barber, 2008). Furthermore, since the 1990s coordination in disaster operations and humanitarian aid has been discussed in Sweden and without producing any successful progress.

While the United Nations (UN) and the North Atlantic Treaty Organization (NATO) are still discussing, the meaning of civil-military coordination vs. cooperation in relations including
joint planning, division of labor and sharing information with humanitarian actors (NATO, 2004). The United Nations Humanitarian Civil-Military Coordination (UN-CMCoord, 2005) offers international communities services extending from: development of guidelines and documentation, facilitating training programs. In such way as supporting military exercises and field exercises. Also, planning, information sharing and task division between military and civilian organizations in disaster operations.

This will certainly, represent for Sweden a platform to argue for coordination, in which planning operations and understanding of each other, could be a major objective. Respondents of interviews argue that; there are generally three levels to consider; (i) Coordination in the home country prior to the disaster (e.g. among Swedish organizations and the Swedish defense), which is aimed at preparedness but also enables both to develop an understanding for each other. (ii) Global coordination with the clusters on an on-going basis (not disaster specific), is aimed at developing common procedures, templates and raise the level of global preparedness (from prepositioning to customs clearance) and (iii) Disaster-specific coordination – which starts with the government in the disaster area and cluster leads

Nevertheless, discussions about increasing coordination in Sweden are still based on the ‘Oslo Guidelines’ as the principle conducting the humanitarian work. It indicating its performance by humanitarian organizations, and retaining a clear distinction between humanitarian and military stakeholders. The question is still, what should be more suitable for Sweden, from a cost/value on a national economic perspective. Therefore, the issue of the ‘Last resort’ should not be seen as a tool complementing existing “humanitarian gaps” in the relief mechanisms in Sweden, but as a mechanism ensuring support to specific requirements for disaster needs. Nevertheless, the ‘Oslo Guidelines’ ensures the use of military assets in disaster operations.

However, this represents limitations restricting the development of coordination among civil-military organizations, if they are politically interpreted as a mandate and not as guideline. Further, the Oslo Guide Lines (2006), addresses to the use of Military Civil and Defense Assets in natural, technological and environmental emergencies in times of peace (Oslo Guidelines, 2006). This appears to strengthen the use of military assets in support of humanitarian operations, completing the body of guide into the OCHA’s Civil Military Coordination Section (CMCS).

The weaknesses may be the interpretation obstacle for coordination, which to a large extent the Swedish Ministry for Foreign Affairs has mentioned. Since the ‘Oslo guidelines’ refers to economic factors as being no reason to enhance a civil-military coordination approach, this becomes a contradiction to the estimations of financing operations critical areas in coordination, such as, security, logistics, medical and transportation.

**Opportunities and threats**

Supplementary discussions regarding the virtual humanitarian space that represents interfaces between the members of the humanitarian system, creating an environment where their mandates can be executed (Tomasini, 2009); along with the discussion of the military space in humanitarian operations. Will provides obstacles in civil-military interactions making it difficult for soldiers to extend their mandates and provide assistance in disasters operations areas. The Haiti experience has, however, brought a number of lessons to Swedish organizations, concerning mandates. Those are often compromised, creating uncertainty and
causing conflicts, because of different role and tasks interpretations by the actors in the extreme operation. Stressing that retaining humanitarian principles in complex environments is often difficult and that military involvements in humanitarian operations challenges organization cultures. A further threat, concerning the role of the defense is that of securing convoys and preventing bottlenecks, displaying the capability of the defense to quickly overcome major bottlenecks through restoring the main arteries of transport infrastructure (e.g. bridges). Cultural differences between defense and humanitarian organizations (and differences in prioritization of what should land first at an airport), are adding to barriers in coordination, e.g. the neutrality aspect of humanitarian organizations and the importance of humanitarian principles.

Additionally, it can be emphasized that civil-military coordination becomes an issue before a disaster takes place and therefore, talks for coordination in the preparedness phase are more appropriate for Swedish actors. As for coordination, this challenges whether they are inaccessible or not become of less importance under the disaster operations. This discussion is completed with respondent’s views ensuring that; whilst using Haiti as example, there is a need to remember that Haiti was not a ‘typical’ disaster – if there is such a thing!! By this I mean that the country had a poor infrastructure beforehand and the disaster itself was a huge undertaking. Most disasters are of much lower scale (at least in terms of death/injury) and so as a result the coordination problems are likely to be of a lesser magnitude.

Moreover, humanitarian organizations have a number of coordination mechanisms through a number of different policy making bodies, all of which together, often with military groups provide funds, information and products. For Sweden, this highlights the need of a consolidated governance of tasks for governmental organizations, in which coordination is specifically approached in the scope of responsibilities to organizations, and in which processes can be adapted for the use of military capacity in humanitarian situation specifically. Further, also vital for Swedish civil-military seems to be a formal coordination platform, in which the different actors can complement the use of their different skills, technologies, and systems in an overall national approach.

It is important to distinguish between the use of national military forces (for example the Swedish military in response to a disaster in Sweden) and international military forces (for example, Swedish military forces responding to a disaster in Haiti). Clearly in the former case it is much easier to prepare – for example to plan how the operation might take place, to agree the command and control arrangements, and other issues. Whereas in the latter case, non-have no idea who might be involved in advance, and then how to make it work in the face of the cultural, language and other barriers.

For the Swedish civil-military organizations, the difficulties and limitations of coordination is the most important issue at hand and this should be considered in creating the ability of reaching the beneficiaries in a disaster operation; if this is at risk, coordination will not be possible. Thus limiting in this way, eventual opportunities of environmental coordination and threatening the operational coordination. It concluded that a humanitarian organization working together with defense forces in one country (in which the defense is not seen as a potential threat and their operation has a sanctioned mandate) may actually impact on the operations of the humanitarian organization in another country. Humanitarian organizations have reported on cases in which media reports on their work in country X (with CIMIC) has led to led to
kidnappings and threats in country Y where the defense was seen a threat, and the attackers questioned the neutrality of the humanitarian organization.

5.4 Civil-military coordination of logistics

Swedish military are still developing robust and capable teams with equipped personnel able to be deployed and trained to conduct operations and develop requirements to providing immediate lifesaving assistance. The context of the Swedish organizations views, regarding coordination of logistics is analyzed by bringing to the surface, areas of attention relevant for organizations in production activities by providing logistics activities; in time, place and quantity utility, because logistics performance has been demonstrated to have an impact in trade competitiveness important in disaster responses. Nevertheless, while the incentives for private companies are measured by profitability, in the case of humanitarian logistics however, the output of the performance could be measured in human lives (Kovács, 2009).

The deployments of a rapid response, together with efficient physical flows and together with military physical flows into the affected areas, are classically intended for peacekeeping scenarios. Those are often coordinated within international or bilateral techniques often within the context of guidelines (Barber, 2008). With that background, the issue of coordination of the logistics activities seems obvious also among Swedish organizations.

Strengths and weaknesses

However, the question is not an easy one, when referring to the general challenges of coordination as previously discussed. For humanitarian organizations; establishing a Joint component command for logistics would result in ineffective and inefficient layering of the Joint task force. It rarely makes sense to establish a Joint functional component commander for logistics to accomplish force sustainment. Humanitarian’s resource, organize, and design forces to be self-sustaining.

Logistics plays a very important role in economic utility and the value to a product or service (Langley, 2008). While information and finances from a source to the final customer, is equally to commercial logistics operations (Kovács, 2007). As logistics in disaster responses struggle with conflicting interests of stakeholder and with unpredictable demands. In Sweden the situation in the interaction of logistics activities seems not to be different than in general. SAF interacts with other actors, anyway, due to the bilateral coordination with MSB participating in field exercises.

Thus, taking measures to strength the logistics processes and utilization of materials and logistics services. In that way, simplifying and streamlining the logistical flows by reducing the number of actors in operations. Further argues that relief efforts, whether during disaster operations or during the aftermath of a natural disaster, are dependent upon the efficient procurement of the right supplies. Those acquisitions are to be whether by land, air or sea, and be storage with good security. In that way those can be handed to people, whenever required. Therefore, a greater coordination and learning are strength elements not only for governmental organizations, but all other actors working in the area of humanitarian aid. In those cases logistics has the potential to enhance the success of coordination and greatly increase the efficiency of operations.
Additionally, is the logistical impacting on the efficiency and the effectiveness of disaster operation, which are important to consider when improving coordination of logistics. The Haiti operation represented numerous complicated operational challenges of relationships in the field of operation during the greater catastrophe environment. However, Swedish governmental organizations face challenges; namely, the development of a clear strategic and mandates aimed for the efficient joining of operational mechanisms in national commitments. Those are vital to strength the needs of future disaster operations. Swedish organizations may require an agreement, on why increased civil-military coordination can improve disaster operations objectives.

There is however, evidence of successful logistics coordination showing greater impacts on disaster operation and strengthening coordination discussion. SAF from various logistics coordination occasions is improving coordination. These include transportation and an ambulance service, interacting with other actors. Coordination is due to the bilateral coordination with MSB, participating in field exercises and taking measures to improve logistics processes and utilization of material and logistics services. SAF and MSB simplified and streamlined the logistical flows in that way reducing the number of actors in operations, ensuring operational effectiveness.

Nevertheless, Swedish military are still developing robust and capable teams with equipped personnel able to be deployed and trained to conduct operations and develop requirements to providing immediate lifesaving assistance. The context of the Swedish organizations views is analyzed, on areas of logistics activities; in time, place and quantity utility. That because logistics performance has been demonstrated to have an impact in trade competitiveness important in disaster responses. Nevertheless, while the incentives for private companies are measured by profitability, in the case of humanitarian logistics however, the output of the performance could be measured in human lives (Kovács, 2009).

The deployment of rapid response, together with efficient military physical flows into the affected areas is classically intended for peacekeeping scenarios. Those are often coordinated within international or bilateral techniques frequently within context of guidelines (Barber, 2008). With that background, the issue of coordination of the logistics activities seems obvious also among Swedish organizations. However, the question is not an easy one, when referring to the general challenges of coordination as previously discussed.

**Opportunities and threats**

Moreover, OCHA, 2101-2013, aiming to improve response with logistics solutions, rapidly delivering to the response requirements, is realizing the issue of civil-military coordination as the use of well trained and exercised chains, ensuring responsiveness of the required needs to victims in disasters. While the World Food Program (WFP) has the global lead for coordination and determine the needs of logistics. WFP is being given the task of controlling critical functions.

During the early phases of the disaster in the Haiti experience, due to the magnitude of the damage caused by the earthquake, the humanitarian response needed major augmentation of the logistics coordination for the overall response. Subsequently, based on a request from the Humanitarian Country Team, the World Food Program activated a Haiti Logistics Cluster cell in Port au Prince and a second cell in Santo Domingo to coordinate the mobilization of
logistics assets and the provision of logistics support services to the humanitarian community. However, at that moment this was not relevant to ensuring operations, but to deliver aid to the affected population. Indicating that inconsistency; between the issue of effectiveness and efficiency, and the issue of coordination can appear to go beyond the control of any coordination structure becoming a potential threat for coordination.

Moreover, in most cases air transportation becomes the only viable alternative into the field of operation because it has strong impact on the operation local capacity building, leading to operational responsibility for air traffic control. It becomes a matter of importance for logistics in terms of prioritizing cargo. Thus, indispensable items reach the disaster area as very quickly enabling clusters to have access to transport (Jensen, 2010). This indicates that logistics activities should be coordinated much earlier, in order to make everyone aware of the correct methods of response. This provides opportunities also for Sweden, responding to any disaster operation, to enter a group of coordinated number of logisticians, from various organizations and together, to create a common aim of trust. Nevertheless, the problem is overcoming the challenges of maintaining long-term relationships. It was argued that the issue of trust, among logistics unit command relationships, led to an enormous positive impact on the operations in Haiti. However, threatening this was the presence of non-doctrinal organizations adding confusion to the logistics command relationships. Indeed, a post-crisis effort to capture and depict the command relationships between logistics units required 16 drafts to arrive at any level of consensus among those involved.

Subsequently, there are major challenges impacting the successes of supply chains in humanitarian issues which require the attention of the Swedish organizations in its attempt to coordinate. Coordinating with focus on the supply chain networks, organizations will increase rapid changes to a flexible response. Nevertheless by simplifying the various aspects of their supply chains, do not contribute to directly profitability, but provide opportunity to reduce inventory levels.

Coordinating with focus on the information challenges the potential of sharing information along the supply chain. And threat the ensuring of integrity preventing sub-optimization. This means that cost and value at the very end of the supply chain can be considered as important.

Further, coordinating with focus on the lower-levels metrics, and investing in technology will support changes that will lead to improve efficiency and effectiveness. However, there are indications about Swedish organizations not taken the challenges into consideration and therefore missing the overall opportunities of coordination. And not seen the overall threats, while organizations are attempting for logistics coordination as an isolated issue.

However, to achieved awareness of supply chains issues with the overall perspective, will make great changes in the conditions for coordination of logistics in the early stages. Nevertheless, there are crucial factors affecting the coordination of logistics; in conclusions regarding the humanitarian principles (incl. that of neutrality – though to which degree this is of importance depends on the organization) and/or a neutral party that coordinates them all. An issue at hand (a bottleneck, an area to access etc.) that triggers the need for coordination, and the counterparts’ ability to address this issue (or address the issue together), the importance to hand over operations in the long run to an in-nation coordinating body, speaks for national/regional governmental bodies to coordinate humanitarian efforts.
Additional, the transportation management issue, should be seen as the glue that make supply chains model function, since the critical outcomes of the supply chain are; to deliver the right product, at the right time, in the right quantity and quality, at the right cost, to the right destination and with reliable delivery of products to customers (Langley, 2008).

Logistics plays a very important role in economic utility and the value to a product or service (Langley, 2008), while information and finances from a source to the final customer, is equally to commercial logistics operations (Kovács, 2007). Logistics in disaster responses struggle with conflicting interests of stakeholder and with unpredictable demands. Additionally, is the logistical impacting on the efficiency and the effectiveness of disaster operation, which are important to consider when improving coordination of logistics. The Haiti operation represented numerous complicated operational challenges of relationships in the field of operation during the greater catastrophe environment. However, Swedish governmental organizations face challenges; namely, the development of a clear strategic and mandates aimed for the efficient joining of operational mechanisms in national commitments for the needs of future disaster operations. Swedish organizations may require an agreement, on why increased civil-military coordination can improve disaster operations objectives.

5.5 Performance evaluation

While the decision to coordinate is still a great issue for Sweden, competitiveness, responsiveness, and customer satisfaction become more important for successful management among governmental organizations. This may imply that governmental organizations cannot work independently anymore in the future. And that learning processes insure the development of coordination.

Moreover, the potential of coordination falls into four main categories: assets and cost efficiencies, customer services improvements, competitive advantages, and profit growth. Therefore, evaluating coordination performance can help to reduce cost and speed up the supply chain. By taking seriously lessons learned and exchanged with those people at organizations will create understanding for the humanitarian needs. Hence, coordination in disaster relief usually encompasses many organizations. Therefore, evaluation of performance is extremely relevant and required; not only being able to address lessons regarding the overall level of aid effectiveness, but to also to contribute to the coordination effectiveness of individual organizations.
6 Conclusions

This chapter will present the conclusions from the case study. This includes the conclusions from the analysis of the empirical findings. Also, the analysis is within the framework of references and presents answers to the initial research questions.

6.1.1 Answering the research questions

The subject of civil-military coordination in disaster operations has been the focus of this research. The aim has been to analyze Swedish governmental organizations strengths and weaknesses in their attempt to increase civil-military coordination in disaster operations. In addition, the ambition has also been to analyze and identify opportunities and threats impacting Swedish coordination in the operational environments. The cited aims may support future discussions for increasing civil-military coordination in Sweden, but may also limit coordination processes if it becomes clear that coordination implicates compromising the humanitarian ideology.

The framework of references of the case study, are based on the existing literature and models covering areas such as: coordination theory, civil-military coordination, supply chain management in the military, the humanitarian perspective and the logistics management, from a humanitarian and a military perspective. Of additional importance, has been the issue of efficiency and effectiveness impacting upon coordination. Moreover, with empirical findings from the governmental organizations in Sweden and the lessons from Haiti, major differences on the perception of coordination between the civil and military were identified. Those differences are in terms of structures, culture, tasks, principles/doctrines and missions, which are all contributing to the unwillingness to coordinate.

The theory framework together with the empirical findings consolidates the foundation of this analysis. It also improves final observations for the use in future studies.

Several indications suggest areas in which the unclear mandate to organizations is causing unnecessary duplication of skills, products and systems resulting in expensive processes to the cost of tax payers. This can, partly explain the reluctance to coordinate, since Swedish governmental organizations have not previously been required to account for their efficiency or effectiveness outputs.

Findings show that at the same time, with the increased demands on efficiency and effectiveness when measuring Swedish organizations performance, together with the increasing requests of military involvement in humanitarian operations; the issue of coordination becomes more obvious among governmental organizations in Sweden. Thus, in this way it is challenging the current political policies, strategies and mandates, governing governmental organizations today.

Addressing the research questions, coordination becomes evident and illustrates the need for organizational changes; from traditional methods and processes, to a more useful and business oriented operations. So that greater efficiency and effectiveness is the desired output. The question of coordination in disaster operations represents also motivation for organizations, to develop areas of performance in which greater use of their resources and capabilities can be achieved. This thesis fails to fully apply business theory to governmental organizations that
are applicable in a humanitarian response; in order to visualize business factors in which coordination can react in an improved manner to the demands of developing humanitarian responses. The reason of this is due to the lack of efficiency and effectiveness monitoring measures available and applicable to governmental organizations.

Previous sections considered some of the problems areas challenging civil-military coordination in Sweden and also showed that the empirical findings are highlighting the need for coherent governance in regard to the humanitarian issue. The need for greater trust and understanding of each other are most important factors in the development of efficient civil-military coordination in Sweden and also the need for a national coordination platform in which organizations can coordinate and develop capability for coordination.

<table>
<thead>
<tr>
<th>Civil-military Coordination in disaster operations</th>
<th>RQ 1: Own organization competitive advantage and exposure of changes</th>
<th>RQ 2: External environment for disaster operations</th>
<th>RQ 3: Performance evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General conditions</td>
<td>Strengths Internal Factors: Horizontal Coordination</td>
<td>Weaknesses Internal Factors: Horizontal Coordination</td>
<td>Opportunities External Factors: Vertical Coordination</td>
</tr>
<tr>
<td>Harmonizing resources</td>
<td>Political disposition</td>
<td>Policy framework</td>
<td>Perception towards military delivering aid.</td>
</tr>
<tr>
<td>Strong commitment</td>
<td>Unclear tasks</td>
<td>Knowledge and expertise in land</td>
<td>Compromising humanitarian principles</td>
</tr>
<tr>
<td>Common planning</td>
<td>Command &amp; control Structure</td>
<td>Access to local population</td>
<td></td>
</tr>
<tr>
<td>Complementary contribution</td>
<td>Regulation of tasks</td>
<td>Prevent duplication of task</td>
<td></td>
</tr>
<tr>
<td>Diversity of skills</td>
<td>Lack of trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common platform</td>
<td>Lack understanding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Civil-military Coordination of Logistics      | Coordinate overall solutions for different uses (effectiveness) | Financial means in organizations, Knowledge and expertise | Manpower, Logistics, Information and security, Financial means |
| Large assessment capacity (scale)             | Means for quick solutions (efficiency)                       | Experience for humanitarian assistance            | Not taken action on experiences |
| Inventory management                          | Unclear division task                                        |                                               |                                             |
| Military transport                            | Coordinate overall solutions for different uses (effectiveness) | Financial means in organizations, Knowledge and expertise | Manpower, Logistics, Information and security, Financial means |
| Other equipment Technology                    | Means for quick solutions (efficiency)                       | Experience for humanitarian assistance            | Not taken action on experiences |
| Information                                   | Coordinate overall solutions for different uses (effectiveness) | Financial means in organizations, Knowledge and expertise | Manpower, Logistics, Information and security, Financial means |

**Figure: 6.8: Research questions overview**

The figure 6.8; presents an overview of the main results of the analysis in connection to the analysis framework in which the theory is being shown to support the analysis. The figure here shows what areas are of importance for civil-military organizations in Sweden when making the choice of coordinating in disaster operations.

The first area, in the figure, summarized the answers of the first question of the research; and implicates strengths and weaknesses that organizations have to deal with if there is to be any coordination both in general and logistics areas.

The second area, in the figure, summarized the answer of second question. This is presenting important opportunities and threats to organizations when coordinating in fields of operations. The intention here is to increase understanding of the great complexity of a civil-military coordination issue with in a whole picture. Lastly, is the performance evaluation issue, answering the third research question. This area suggests the importance of taking very
The first conclusion of this study, regarding the intention of civil-military coordination is proposing that the study draws on the perspectives of conditions for governmental organizations to integrate activities preventing duplication and overlap. However, the results of the study, indicates that increasing coordination among Swedish organizations in disaster operations will not be considered as an issue of higher priority, among organizations, unless conditions in their mandates have a clear requirement to coordinate within an overall objective. Nevertheless, whilst describing as to why coordination is important among Swedish governmental organizations. Presently, there is no conflict between the MFA and DOD in defining which of the governmental organizations coordinates. However, the problem is to decide as to what extent, the coordination can be considered as valuable. Therefore, unnecessary and problematic discussions may cause disruption among organizations. Reducing disruption demands that; differences between strategic and operational coordination should therefore, be governed by MFA and DOD solving organizational conflicts about tasking. Further, this supports the premise that there are areas of humanitarian response that are unrelated to strategy.

Further conclusions, from the results of the study and that are based on the short-term coordination perspective of the military towards humanitarian activities, show that several organizations are successfully benefiting from the current coordination of logistics activities. This provides highly beneficial results for the humanitarian response. However, the results of the study indicate that coordination needs to be formalized for all the organizations involved. Nevertheless, by formalizing the current logistics coordination between SAF, MSB and SIDA, might bring organizations a step ahead in trust with communicating and understanding each other. Unresolved still, is whether increasing civil-military coordination in the logistics areas is a marginal activity, preventing duplication and overlapping or a more integrated activity that seeks to complement responses as part or as a single strategy reaching higher effectiveness and efficiency of national resources.

The main conclusion of the case study thus recognizes opportunities and threats in operations environments, as an essential factor to create skills and understanding of the humanitarian struggles. In this meaning, the recognition of opportunities and threats by the participants is essential to the success of coordination. Furthermore, in this way and at a national level, is crucial to increase organizations efficiency in planning and managing of disaster operations to better respond and develop new abilities in required areas. Those are such as: logistics, processes, information, technology, transportation and security. This appears to be the governmental organizations greatest strength and therefore, in order to improve effectiveness and an efficient response in disaster operations, it is strongly recommended that the Swedish DOD and MFA take the overall responsibility for a recognized framework. This would regulate the humanitarian work in Sweden, into a coordinated set of mandates and tasks of responsibilities to the governmental organizations, in which it becomes very clear, which organizations are responsible for creating a coordination platform and into what economical extent shall coordination be discussed.

In spite of the empirical findings, one of the main conclusions of the case study is recognizing opportunities and threats in operational environments. That would also constitute an essential factor to create skills, and understanding of the humanitarian struggles. And in that way, at a national level, increase organizations efficiency in planning and managing of disaster
operations. Further, it would provide a better response and develop new abilities in required areas, such as: logistics, processes, information, technology, transportation and security.

Moreover, answering the third research question, regarding performance evaluations. This indicates that by analyzing areas in which Swedish organizations are performing may not only assist with developing a process based on lessons learned between organizations but also the gained lessons from the Haiti experience. However, to improve a Swedish coordination alternative among Swedish governmental organizations would require a wider evaluation of personal experiences in the field of operations. These evaluations should be managed with a subsequent designed checklist and processes that impact on coordination.

Nonetheless, the analysis demonstrated a final conclusion retaining that; based on the internal strengths and weaknesses and the external opportunities and threats, each organization can determine whether or not they should participate in coordination. And if an organization decides to start coordination, a strategic plan should be developed presenting all tasks and objectives in which the future coordination ought to be defined.
7 Discussions

The results of the analysis, take a step to the final part, which are the theoretical and managerial implications, based on observations made whilst carrying out the study. This also presents ideas for further research.

7.1 Theoretical implications

The development of civil-military coordination in Sweden is critical for all the governmental organizations, but from a cost/value and efficiency perspective coordination could be the way to motivate greater disaster operations effectiveness. To complete this research and to be able to analyze the findings, a model was created, including the key elements of the theory used, in a condensed manner, thus enabling readers an achievable understanding of the issues concerning coordination among Swedish governmental organizations. This model considers internal factors, regarding civil-military logistics activities in organizations, and external factors, regarding humanitarian and military environmental implications, in which theory of coordination, cluster, and supply chain management both in humanitarian and military contexts were approached, as well as aspects of the humanitarian and military space. It regards further, the complexity of coordination that can be approached from diverse perspectives and this model should not be ignored in future research, but presents potentially, a great improvement.

7.2 Managerial implications

When considering the analysis, it becomes evident the similarities between the empirical and the theoretical backgrounds. Several actors in the civil-military organizations are aware of the complexity that an increased coordination could imply. Hereafter, there are some of the implications worthy of highlighting. Despite coordination benefits, there are certain challenges that limit the success of coordination that organizations in questions are force to deal with in their attempt to coordinate.

Firstly, the cultural conflicts, because people act and think as members of organizations and are loyal to those. Secondly, are structural difficulties; centralized and decentralized structures of management can implicate problems or delays in decision making and therefore stopping coordination. Thirdly, coordination costs; the humanitarian organizations have limited resources and therefore sensitive for robust engagements (Akhtar, 2012). Fourthly, achieving a common platform can represent difficulties if there are not clear purposes and outcomes which become time consuming impacting coordination negatively. The fifth is the lack of support from government officials; can split directions and tasks creating inefficiency. The sixth is the limited budget restrictions; implicating that none of the organizations recognizes the responsibility of taking the lead in the coordination process. The lack of skills and resources in disasters operation represents a need of understanding and the developing of humanitarian skills.

Finally, the trust issue and the understanding of problems encountered can be considered as the greatest obstacles preventing civil-military coordination in Sweden, not only among governmental organizations, but also from the perspective of tax payers, who are financing expensive assets that display inefficient processes and objectives.
7.3 Future research

Effectiveness and efficiency are the key outputs resulting from major decisions by those managing relationships within the supply chains. These are important, but are not sufficient to increase civil-military coordination. Therefore, future academic research is required to examine the relationships of the individualities of the supply chain coordinators and their coordination outputs. Since personnel at such organizations may not have a full understanding of the great importance of coordination. Also, it must be considered that the research on performance evaluations, measures effectiveness and efficiency of not only single governmental organizations, but is also required on an overall national level. Finally, the reaction of people in response for military involvement in humanitarian operations is also, posturing challenges, becoming an area for further research.
8 References


OCHA. (2007). Civil-Military coordination officer filed handbook *UN Office for the Coordination of Humanitarian Affairs DG ECHO, UN Brussels*


Policy for Sweden Humanitara Assistance (2011).


## APPENDIX 1: SCHEDULE DATA COLLECTION

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Point</th>
<th>Interview plan</th>
<th>Organizations Civil – Military</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 5-6</td>
<td>Problem, Purpose, Literature study, and Method approach – PM1</td>
<td>First set of questions to points of contacts for Haiti case</td>
<td>Southern Command, World Food Program, UN expert and NGOs (expected 5 respondents – Haiti case)</td>
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<tr>
<td>Week 7-12</td>
<td>Research: nature and characteristics of Coordination civil-military – case study – PM2</td>
<td>prepare and send interview questions to respondents for Haiti case and to the Swedish organizations.</td>
<td>Southern Command, World Food Program, NGOs. För Haiti case. DOD, MFA, SAF, FMV, FOI, FHS, FBA, MSB, SIDA. For Swedish case. OCHA, HUMLOG, GUA. For expertise view.</td>
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<tr>
<td>Week 12-16</td>
<td>Research on Military and Humanitarian actors – interview process begins - PM3</td>
<td>Implementation of the interviews (writing answers) and collecting other relevant secondary data</td>
<td>Southern Command, World Food Program, in the Haiti case. And Civil-military governmental organizations in Sweden and expertise</td>
</tr>
<tr>
<td>Week 16-18</td>
<td>Writing the case description into the thesis – analyses and foundings - feed back to the responders</td>
<td>Analisys of data collected and its application to the reseach questions.</td>
<td>Swedish Civil-Military organizations DOD, SAF, FMV, FOI, FHS, MFA, MSB, SIDA. And FBA</td>
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<tr>
<td>Week 19</td>
<td>”Mock defense” Complete version of the thesis – PM4</td>
<td>Completion of information and final research conclusions</td>
<td>OCHA, HUMLOG, GUA. For expertise view.</td>
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<tr>
<td>Week 21</td>
<td>Finsih dead line!</td>
<td>Final defence of the research conclusions</td>
<td>Hard copy to organizations.</td>
</tr>
</tbody>
</table>
### APPENDIX 2: RESPONDENTS

<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Organizations Name</th>
<th>Respondent Name</th>
<th>Role and Unit</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFA</td>
<td>Ministry of Foreign Affairs</td>
<td>Jakob Hallgren</td>
<td>Deputy Director of Section for Humanitarian Policy</td>
<td>2012-03-25</td>
</tr>
<tr>
<td>DoD</td>
<td>Ministry of Defence</td>
<td>Michael Kock</td>
<td>Deputy Director of Unit for Emergency and Preparedness</td>
<td>2012-03-20</td>
</tr>
<tr>
<td>MSB</td>
<td>Swedish Civil Contingencies Agency</td>
<td>Lage Backman</td>
<td>Program Manager, Logistics and Support Section</td>
<td>2012-03-22</td>
</tr>
<tr>
<td>MSB</td>
<td>Swedish Civil Contingencies Agency</td>
<td>Hans Martinsson</td>
<td>Coordinator of Operations and Coordination Department</td>
<td>2012-03-23</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
<td>Per Byman</td>
<td>Director of Unit for Humanitarian Assistance</td>
<td>2012-04-05</td>
</tr>
<tr>
<td>FBA</td>
<td>Swedish Agency for Peace, Security and Development</td>
<td>Tina Heino</td>
<td>Head of Department, International Recruitment and Mission Support</td>
<td>2012-04-04</td>
</tr>
<tr>
<td>HUMLOG</td>
<td>Humanitarian Logistics and Supply Chain Research Institute</td>
<td>Gyöngyi Kovács</td>
<td>Director, HUMLOG Institute</td>
<td>2012-03-21</td>
</tr>
<tr>
<td>GUA</td>
<td>Griffith University, Australia</td>
<td>Peter Tarham</td>
<td>Senior Lecturer, PhD FCIT MCBCS MCIPS Ceng</td>
<td>2012-03-26</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme, Port-au-Prince - Haiti</td>
<td>Viviana De Amantis</td>
<td>Liaison Officer of Emergency Preparedness &amp; Civil Military Section</td>
<td>2012-03-19</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme, Port-au-Prince - Haiti</td>
<td>Edmondo Perrone</td>
<td>Liaison Officer of Emergency Preparedness &amp; Civil Military Section</td>
<td>2012-03-19</td>
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<tr>
<td>WFP</td>
<td>World Food Programme, Port-au-Prince - Haiti</td>
<td>Karja Hildebrand</td>
<td>Liaison Officer of Emergency Preparedness &amp; Civil Military Section</td>
<td>2012-03-19</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme, Port-au-Prince - Haiti</td>
<td>Alfose Bedout</td>
<td>Liaison Officer of Emergency Preparedness &amp; Civil Military Section</td>
<td>2012-03-19</td>
</tr>
<tr>
<td>SOUTHCOM</td>
<td>United States Southern Command</td>
<td>Robert (Bob) H. Will Jr.</td>
<td>Chief, Joint Logistics Operations Center</td>
<td>2012-03-05</td>
</tr>
<tr>
<td>SOUTHCOM</td>
<td>United States Southern Command</td>
<td>Joe Torres</td>
<td>J9, USIFCOM, Concept Group</td>
<td>2012-03-05</td>
</tr>
<tr>
<td>SAF</td>
<td>Swedish Armed Forces, Headquarters</td>
<td>Bengt Andersson</td>
<td>Chief of Logistics Operations</td>
<td>2012-03-27</td>
</tr>
<tr>
<td>SAF</td>
<td>Swedish Armed Forces, Headquarters</td>
<td>Håkan Röglund</td>
<td>Captain (N) ACOS J4, Operations J4 Logistics</td>
<td>2012-04-30</td>
</tr>
<tr>
<td>FMV</td>
<td>Swedish Defence Materiel Administration</td>
<td>Dan Olsson</td>
<td>Director General</td>
<td>2012-04-03</td>
</tr>
<tr>
<td>FMV</td>
<td>Swedish Defence Materiel Administration</td>
<td>Anders Brunnberg</td>
<td>Director of Logistics Procurement Command</td>
<td>2012-04-11</td>
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<tr>
<td>FMV</td>
<td>Swedish Defence Materiel Administration</td>
<td>Nik-Anders Elberg</td>
<td>Program Manager, Strategic Planning and Development</td>
<td>2012-03-12</td>
</tr>
<tr>
<td>FHS</td>
<td>The National Defence College</td>
<td>Bo Jiffält</td>
<td>Education Director, National Defense College</td>
<td>2012-04-04</td>
</tr>
<tr>
<td>FOI</td>
<td>Swedish Defence Research Agency</td>
<td>Björn Backström</td>
<td>Operations Analysts of Division of Defence Analysis</td>
<td>2012-04-02</td>
</tr>
<tr>
<td>FOI</td>
<td>Swedish Defence Research Agency</td>
<td>Anna Weibull</td>
<td>Analysts of Division of Defence Analysis</td>
<td>2012-03-27</td>
</tr>
<tr>
<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
<td>Fredly L. PolK</td>
<td>Senior Advisor, OCHA</td>
<td>Asked</td>
</tr>
<tr>
<td>US DOD</td>
<td>U.S. Department of State, Office of Coordination</td>
<td>Gregory S. Gerou</td>
<td>Deputy Chief of Mission Support, Civilian Response Corps</td>
<td>Asked</td>
</tr>
<tr>
<td>WFP</td>
<td>United Nations Humanitarian Response</td>
<td>Kyungman Park</td>
<td>Officer for Response Depot/Logistic Cluster</td>
<td>Asked</td>
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<tr>
<td>FBA</td>
<td>Swedish Agency for Peace, Security and Development</td>
<td>Anna Karphammar</td>
<td>Expert at AG MyndSam</td>
<td>Asked</td>
</tr>
<tr>
<td>MSB</td>
<td>Swedish Civil Contingencies Agency</td>
<td>Helena Lindberg</td>
<td>General Director at Swedish Civil Contingency Agency</td>
<td>Asked</td>
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<tr>
<td>MSB</td>
<td>Swedish Civil Contingencies Agency</td>
<td>Hazme Akyol</td>
<td>Chief of the Logistics Unit</td>
<td>Asked</td>
</tr>
<tr>
<td>DoD</td>
<td>Ministry of Defence</td>
<td>Ulrica Grudin</td>
<td>Chief of Unit for the Coordination of Emergency Preparedness</td>
<td>Asked</td>
</tr>
</tbody>
</table>
APENDIX 3: INTERVIEW QUESTIONS

The suggested questions are intended as a guide for the respondents’ answers. This means that if you as a respondent, think or feel there are further concerns supporting this subject that need to be addressed in the questions and/or the answers, then please do not hesitate in making additional comments.

Interview Questions

Step 1: Questions about general conditions enabling Civil-Military Coordination

1. Based on the organization’s mandate and tasking, please describe your organization’s viewpoint regarding perspective and background thinking to a response in a disaster situation.

2. Which other partners are considered, by your organization, as coordinating partners in disasters operations?

3. Which organizations are participating in coordination discussions, and in which stages of the operations is coordination intended to be utilized?

4. If there is civil-military coordination, what are the considered major incentives in such coordination?

5. If there is civil-military coordination, how is coordination managed in your organization, and what key roles are involved in the decisions?

6. What can Swedish organizations learn from the Haiti experiences of civil-military coordination?

Step 2: Questions of the importance of civil-military Coordination

1. What are the main reasons for your organization to be a participant in disaster operations?

2. What decisions need to be taken and by whom (role) to increase civil-military coordination at your organization? What are the strengths and the weaknesses in your organization in that process?

3. To what extent, can such weaknesses and/or strengths, influence your decision to actively coordinate in disaster operations?

4. What is the principal motivation to coordinate efforts with other organizations during a disaster operation?

5. What are the desired qualities or assets of the other actors involved, required or essential, to make coordination possible?
6. In which areas of the operation are you coordinating and what kind of response do you receive from the other organizations in this field of operation?

7. Are there other alternatives, instead of coordination to achieve the targets and the objectives of your organization?

8. What is important, regarding the decision of coordination, from your organization’s point of view?

9. What kinds of problems arise, during the process of coordination decisions and why do those problems arise? How do you manage those problems?

10. What other issues have been missed and could be improved in gaining a better coordination on the field of operation in disasters?

11. Would you like to give any other important points that you or your organization should have considered, and that are important for enhancing civil-military coordination?

Any other contributions you may want to complete your answer with. Please give.

Step 3: Questions about coordination of logistics areas for disasters operations

1. Which actors are can usually be found in disasters operations and which activities or roles are they performing? Please present an approximation of the number of people and their functions in a disaster operation?

2. What factors do you think are crucial for the organizations willingness of coordination?

3. What problems usually arise during the coordination implementation, and why?

4. How do you manage these problems? How do others manage the same problems?

5. When is a situation encountered in which coordination is not possible? And what is the main reason for this?

6. To what extent could coordination be planned?

7. What are important factors when taking and given responsibilities between civil-military organizations?

8. How do you manage to give and take responsibility?

9. Do you keep contact with your coordinating colleges from the crisis field after the operation?

Other contributions you may want to complete your answer with. Please give.
Step 4: Performance and Evaluation of coordination in disasters operations

1. How do you think your organization evaluates the coordination performance between civil-military organizations in disasters operations?

2. How or to what extent do you evaluate your own coordination performance?

3. What factors are important for your organization in the evaluation of their coordination performance?

4. If there is not an evaluation process, what criteria do you think organizations should use next time?

5. Have there been any problems during the evaluation of the coordination performance in disasters operations, why and where?

6. If there are such problems, how do you manage those problems?

7. To what extend could the civil-military coordination experiences from Haiti contribute to future cases, and in what areas and at what levels?

8. Are you able to contribute or give any advice to the civil-military organizations in Sweden regarding the coordination of combined efforts in humanitarian areas?
## APPENDIX 4: IMPORTANT DOCUMENTS

<table>
<thead>
<tr>
<th>Framework Civil-military</th>
<th>Issue</th>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Ministry for Foreign Affairs – UD. Policy for Sweden’s Humanitarian Assistance-2010-2016</td>
<td>Sets out the basic premises and principals for direction of humanitarian work</td>
<td>Political overall goal, basic principles guiding planning for implementation of disaster operations</td>
<td>Policy mapping in practice difficult for organizations to achieve</td>
</tr>
<tr>
<td>Swedish International Development Cooperation Agency SIDA. Strategy for Humanitarian Assistance 2011-2014 (Ministry for Foreign Affairs through SIDA)</td>
<td>Governs the humanitarian assistance, based on the government policy</td>
<td>Sets out overall objective (save lives, alleviate suffering and maintain human dignity) being provided by rapid, flexible and qualitative support in an increased coordinated response</td>
<td>Political leadership unclear in instructions of different tasks. Applicability of strategy difficult because of Swedish law foundation regarding authorities not being superior one another. Some authorities do not want to coordinate, because there is not necessary</td>
</tr>
<tr>
<td>Ministry for foreign Affairs UD. National Strategy for Swedish Participation in International Peace-support and security building Operations 2008</td>
<td>Strategy with guidance for Swedish action in international peace-support and security building operations.</td>
<td>Create basis for an effective use of resources for rapid response, supporting civil-military coordination in areas of operations in which Sweden should be taking part.</td>
<td>Difficult of coordination consistency of command and control chain when Ministry for Foreign Affairs responsible; for assistance relief and security policy, acting thought other department performing thought different states authorities.</td>
</tr>
<tr>
<td>Ministry for Foreign Affairs MFA “Oslo Guidelines”-The Use of Foreign Military and Civil Defense Assets In Disaster Relief- Rev. 1.1 2007</td>
<td>Presents guidelines for the use of military and civil defense assets in disaster relief</td>
<td>Ensures increase trend of the use of military assets in support of humanitarian response and bring guidelines for the use of military and civil assets in supporting activities in complex emergencies through OCHA’s Civil Military coordination section.</td>
<td>Obstacle to civil-military coordination is “Oslo Guidelines”, which Ministry for Foreign Affairs refers to a large extent linking it to financing of operations. This means a different approach than Defense Department’s approach. Oslo guidelines refer to economy as no reason to enhance civil-military coordination.</td>
</tr>
<tr>
<td>Swedish Civil Contingencies Agency MSB. Regulatory Letter 2010-Mission 18 (Regleringsbrev, 2010, Uppdrag 18)</td>
<td>MSB ensures logistics coordination with SAF</td>
<td>Ensures increase trend of the use of military assets in support of humanitarian response and bring guidelines for the use of military and civil assets in supporting activities in complex emergencies through OCHA’s Civil Military coordination section.</td>
<td>The Swedish Civil Contingencies Agency simple mission is; prepare and have resources for humanitarian operations in civil-military interaction of several areas. Policies and mandates are at government level and coordination at operational levels.</td>
</tr>
<tr>
<td>Swedish Armed Forces, SAF. Ordinance with instructions for the task of the SAF (2007:1266) (Svensk Författningssamling (SFS) Förordning (2007:1266) med instruction för Försvarsmakten-Sveriges Riksdag)</td>
<td>The Swedish Government gives overall tasks and area of responsibility to the Armed Forces at with existing capabilities, provide support to civil operations</td>
<td>Swedish Armed has a desire to participate in humanitarian efforts, but task and funding are not available.</td>
<td>Swedish Armed Forces controlling of operations is conducted within strictly regulated budgets which limits the ability to increase participation in humanitarian work.</td>
</tr>
<tr>
<td>Organization/Ordinance</td>
<td>Description</td>
<td>Ministry/Department</td>
<td>Comments</td>
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<tr>
<td>The Swedish National Audit Office, RiR. 2011:15 Swedish Armed Forces to Civil Society in Time of Crisis “9 § lagen” (2002:1022)</td>
<td>Office reveals conditions enabling Swedish Armed Forces to ensure a higher benefit for the civil society.</td>
<td>The only coordination given is, within governmental organizations in an efficiency priority.</td>
<td>Difficulties when most governmental organizations seek coordination at the same time in a not expressed needed an unclear tasks</td>
</tr>
<tr>
<td>Folke Bernadotte Academy-Swedish Agency for Peace, Security and Development, FBA. Ordinance (2007:1218) containing instructions (ändrad SFS 2009:25)</td>
<td>Instruction regulating for supporting national and international coordination</td>
<td>Ministry for Foreign Affairs given directive in which to lead coordination of efficient implementation of operations and maintenance and also develop a coordination process is included.</td>
<td>Given instructions for national and international coordination comes from different parts of Ministry for Foreign Affairs which is not optimal! This information becomes fragmented.</td>
</tr>
<tr>
<td>National Defense College, FHS. Ordinance (2007:1164) for the National Defense College in Swedish Statute Book 2007:1164Swedish Code of Statutes 2007:1164, Chapter 5</td>
<td>Instructions regulating military education</td>
<td>Other training at the Military Academy, on behalf of the Agency for Civil Contingencies (MSB) or other organizations such Swedish Armed Forces (SAF) regarding training for civil safety and security</td>
<td>It needs a political determination from the Ministry for Foreign Affairs (UD) and The Defense Department (FÖ) to coordinate, plan and participate in courses and training using the resources at the National Defense College FHS</td>
</tr>
<tr>
<td>Swedish Department of Defense, DOD. Government Prop:140; A functional defense 2008/09 “Ett användbart försvar” Regeringens proposition 2008/09:140Prop. National Strategy for Swedish participation in internationell freds- och säkerhetsfrämjande verksamhet (2007/08:51)</td>
<td>The Proposition gives assessment to SAF: regarding Civil-military coordination before and during international efforts being strengthened.</td>
<td>A good information exchange between all actors, both military as civilians, including humanitarian organizations, is essential for achieving effective coordination</td>
<td>There are not legal conditions or political interest in pushing through proposals and-or strategies, because they do not give political points. What is needed is the higher coordination among various state departments, without political interests and without overlapping tasks and a clearly and efficient military leadership with and overall perspective</td>
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</table>

“It is not the strongest of the species that survive or the most intelligent, but the one most responsive to change”. Charles Darwin