



DEPARTMENT OF POLITICAL SCIENCE

The thinking of New Public Governance in Swedish crisis preparedness:

A case study of The Swedish Civil Contingencies Agency (MSB)

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Abstract

During 2021, a rising number of natural disasters occurred across Europe. Such events evoke passionate debates concerning guilt, accountability and regarding the division of responsibilities for crisis preparedness. Researchers argue that in order to be prepared and solve crises, a great mobilization of different resources, knowledge, and skills is required. This study aims to contribute to the understanding of the ideas that is included in the thinking of NPG, with a focus on Sweden crisis preparedness. Data is collected through interviews at MSB, a Swedish governmental agency. A research gap is identified regarding how governmental agencies work to effectively manage challenges through non-hierarchical processes and which factors that could foster the performance for effective collaboration. Findings show that NPG is taking place in Swedish crisis preparedness since MSB is using same concepts and advocates for the same ideas in crisis preparedness, as NPG does. Previous research has identified accountability and an unclear division of responsibility as challenges to the thinking of NPG, which findings in this study support. Factors that could be a solution to these challenges and foster effective collaborative crisis preparedness is coordination, the presence of a whole society approach and communication. Future research could go deeper into additional parties involved in Swedish crisis preparedness and contribute to the subject. This is even more urgent in a time when natural disasters are projected to increase and thus, collaborative crisis preparedness will play a crucial role in civil protection.

Key words: New Public Governance (NPG), Collaboration, Natural disasters, The Swedish Civil Contingencies Agency (MSB), Co-production.

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1. Introduction

In the last years, the world has been hit by a pandemic that has caused severe human suffering. Covid-19 has affected people directly through sickness and deaths but also indirectly through social, economic disruption and pausing human advancement (WHO, 2020). Although the pandemic has been a wide-ranged and prolonged crisis, there are still other crises that require preparedness as well. A crisis is commonly said to be ... “*situations that are being experienced as seriously threatening to core values or structures, requiring urgent action, yet also highly uncertain as to their origins ...*” (Boin et al, 2005, p. 2). There are a great number of threats and risks that could have a severe impact on societies and on populations. A crisis could arise from everything from antagonistic threats, international conflicts and destabilization to cyber-attacks, climate change and natural disasters (MSB, 2021c).

An increasing number of natural disasters did happen throughout Europe during the year 2021. There were severe floods in Germany, Belgium, Netherlands and Luxembourg and fires running wild in Spain and Greece, which caused several deaths (BBC, 2021; Michaelson, 2021). In the US, an analysis of the Federal disaster declaration showed that almost one out of 3 Americans lived in a county that was hit by some kind of weather disaster (Ba Tran & Kaplan, 2021). Contemporary research concludes that events like this will not disappear or become less visible. On the contrary, the sixth assessment IPCC report in 2021 *Climate Change 2021: The Physical Science Basis*, captures that the effects of climate change are that extreme events such as heat waves, storms, floods, forest fires and sea level rise are expected to continue to increase and become more common.

Events as such do evoke passionate debates concerning guilt and accountability regarding the division of responsibilities for crisis preparedness (Boin et al., 2009; Kuipers and t’Hart, 2014; Perry and Quarantelli, 2005; Steinberg, 2000; Quarantelli 1998). Since the tsunami disaster in south-east Asia in 2004, Sweden has gone through several evaluations and reports by Government commissions of inquiry (SOU series) regarding the country’s crisis preparedness (Aps et al, 2015; Coronakommissionen, 2021, p. 175; Riksrevisionen, 2008, p. 8; SOU 2005:104; SOU 2021:89) and the government has received critique for unclear and deteriorating crisis management (Försvarsberedningen, 2021, p. 135; Sveriges Radio, 2021).

1.1 Research problem, aim and research questions

There is no one authority or organization alone who has the sole responsibility for crisis preparedness in Sweden and one of the core principles for crisis preparedness, the principle of responsibility, states that “*those actors responsible for an activity under normal circumstances retain this responsibility in the event of societal disruptions*” (MSB, 2021c, p. 33). This implies that actors such as governmental agencies, NGOs, individuals, trade and businesses are responsible for the same set of tasks under a crisis as they do during normal circumstances.

Earlier research has shown that there has been a shift from the traditional thinking of public administration, which included hierarchical governance practices, towards the global trends of New Public Management (NPM) and market-based orientation and now, a transition toward the thinking of New Public Governance (NPG) with an increasing inclusive civil society (Howlett et.al., 2017; O’Flynn, 2007). According to researchers, Sweden has been influenced by the thinking of NPG since there has been a devolution of political power and policy steering has decentralized towards a more local influence and shifts in responsibility from the state to individuals (Asp and Sjölund, 2014; Bergström & Rothstein, 1999; Carlsson, 2021; Larsson, 2019). Co-production, which is one of the core aspects of NPG, is the combination of state and non-state actors and how they together inform and produce public services (Alford 1998; Howlett et.al, 2017; Osborne 2006; Pestoff 2006; Voorberg et al. 2014).

Researchers are arguing that to be prepared and solve crises, it requires great mobilization of different resources, knowledge, and skills (Bynander and Nohrstedt, 2020). This includes capacity from not only one single public actor but requires collaboration between different levels of government, public organizations, non-state actors, private companies, and across sectors (Alford and Head, 2017; Cristofoli et al., 2017). Simultaneously, the Swedish civil contingencies agency (MSB) calls for increased collaboration in crisis preparedness and that a new principle, *the principle of collaboration*, should be included as a core principle in crisis preparedness (MSB, 2016). MSB is a Swedish central authority that has the responsibility for issues regarding emergency management, civil protection and public safety when no other authority covers it (MSB, 2019b).

Since there has been a request for increasing involvement and collaboration between actors at all political levels, this paper will examine if NPG is taking place in Swedish crisis

preparedness, and what factors there are that could foster effective collaborative crisis preparedness. Data will be collected through interviews at MSB, and findings will be analyzed from the analytical framework of NPG and previous research. The aim of this study is to contribute with knowledge about the collaborative style and co-production that is included in the thinking of NPG and contribute to the field of research within collaborative crisis preparedness with a focus on Sweden. The result can support Swedish authorities with information about challenges and opportunities within the field of collaborative crisis preparedness and what factors there are for effective collaborative crisis preparedness.

This paper wants to influence future research within this field since it is socially important to examine challenges behind effective crisis preparedness and how this could be operated when there are requests for further collaboration in the field. It is even more urgent in a time when natural disasters are projected to increase and thus, crisis preparedness will play a crucial role in civil protection. The research questions of this paper are:

Is NPG taking place in Swedish crisis preparedness?

What are the factors that could foster effective collaborative crisis preparedness?

1.2 Disposition

This paper is divided into eight chapters which all contain subcategories. The introduction aims to give the reader an understanding of the research area of the thesis and give a clear picture of the study's purpose and issues. Chapter two covers previous research concerning the research area which leads up to a presentation of the research gap. Chapter three consists of an introduction to the analytical framework in this study (NPG) and the challenges that come with NPG thinking in a Swedish context. The analytical schema is also presented. Chapter four includes the study's choice of method and describes all method choices in detail. Furthermore, the material that is used in this study is described and discussed. Chapter five consists of the background and discussion of Swedish public administration, crisis management and development of Swedish crisis preparedness. In addition, the chapter includes an introduction to MSB's role in Swedish crisis preparedness and a discussion of the term 'natural disasters' used in this study. Chapter six presents an analysis and presentation of the collected findings and chapter seven will discuss these findings in more detail. Lastly, chapter eight presents a conclusion for this study and suggestions for future research.

2. Previous research

2.1 The importance of collaboration

In recent years, there has been a development in public administration and management related to collaborative governance. Related subfields and disciplines have increased our knowledge and recognition amongst stakeholders and policy actors on how to facilitate collaboration between actors working together. However, there are still essential lessons in collaborative governance in different problem settings that we can learn from (Bynander and Nohrstedt, 2020).

Despite an increasing interest in both horizontal and vertical collaboration, its dynamics have received little attention within the literature on public management (Customato, 2021). Hazards and crises are often illustrated as “wicked problems”, which are complex problems that have a variety of possible solutions (Nohrstedt, 2018). Weber and Khademian (2008) are researching how to understand different solutions to these problems. They argue that in public and governing structures, an alternative solution to solve complex problems is argued to be networks, since scarce resources could be shared to achieve collective goals. Such networks are defined as established exchange relations between groups, individuals, and organizations and could be arranged between different governmental agencies or through a combination of individuals from a variety of sectors. The authors capture several positive features of network settings such as shared resources, the collaborative capacity to solve problems, shared goals are being addressed and it could create learning opportunities. But there are also challenges with the integration, transfer, and receipt of knowledge across a variety of actors to effectively manage public problems in these settings (Weber and Khademian, 2008, p. 336).

According to Huxham and Vangen (2005), the goal is to achieve a collaborative advantage that could solve most of the problems, but only if the collaboration is effective. Head and Alford (2015) argue that collaboration between different actors within a society is hard to achieve and a very resource-consuming activity that needs great effort. The constellation of different collaborations ranges within and between states, communities, private actors, and interests. It is argued to be very important at the state and the strategic level (Boin and ‘t Hart, 2010; Kapucu, 2005; Nohrstedt et al. 2018) and as crisis management nowadays is dependent on greater professionalization (Streib and Waugh, 2006), there is also this need to outsource, or decentralize, management and preparedness to a growing number of actors and interests

(Bryden and Caparini, 2006). Destabilizing situations or extreme events that result in a crisis do also come with challenges associated with managing accountability and avoiding blame (Boin et al., 2010; Brändström and Kuipers, 2003). A researcher that captured a study on the work and practices in collaborative crisis management is Deverell (2020). The study's data consists of 19 interviews with crisis communicators in Sweden at the local level and explains that a functional collaboration between different agencies is vital to achieving success. The previous research that are presented above do argue for that collaboration is essential to achieve solutions for complex problems such as crises, and that this collaboration ranges within and between states, governmental agencies, NGOs, private actors, and individuals.

2.2 Challenges and factors for effective collaboration

As a result of a growing number of actors and interests in crisis preparedness, it creates increasing expectations and demands on these diverse actors to develop collaborative skills and competency. Collaborative crisis preparedness is therefore dependent on social ties, or relationships, that are being formed between these actors and interests (Bies and Simo, 2007; Brudney and Gazley, 2009; Demiroz and Hu, 2014; Næss et al., 2005; Koliba et al., 2011; Lemos and Agrawal 2009). The result from a study made in Sweden, examining crash stimulation of a plane, supports this argument. The study captures that actors who cooperated in the planning of the exercise also cooperated more effectively during the exercise itself (Danielsson and Eliasson, 2010).

Another challenge that has been captured in the development of collaborative management is the power imbalance between agencies, which has been captured in several other studies (Ansell & Gash, 2008; Emerson & Nabatchi, 2015; Fisk et al., 2019; Huxham et al., 2000; O'Leary & Vij, 2012). Borell et.al (2018) conducted a bottom-up investigation on Swedish crisis preparedness at the local and regional levels. Their research aimed to identify pre-requisites for effective crisis preparedness and to increase knowledge behind the management, including motivational factors, collaboration on different levels, and incentives. The researchers conducted interviews with local and regional crisis preparedness planners and the interviewees expressed that communication and collaboration are vital for crisis preparedness implementation. Through communication, planners can understand the needs of actors within the working area and realize if there are different working cultures, needs and if language is used differently. The authors suggest in their conclusion for further research that to get more

information on the barriers and enablers in the planning for crisis preparedness, one could conduct a top-down perspective as well and collect thoughts from a higher organizational level (pp. 410-411).

Furthermore, according to Bynander and Nohrstedt (2020) large-scale crises require great mobilization of different resources, knowledge, and skills. The researchers argue that the collaborative approach to crisis management has developed to be an essential priority; however, these collaborations must be capable of adjusting procedures to achieve adaptability. The researchers argue that records show that such multi-organizational networks do often underperform due to ineffective coordination and difficulties to achieve common understandings. One explanation is that it is hard to find suitable levels of overlap between networks of actors that work together to prepare and plan for crises (pp. 1-3). Christensen et al. (2016) capture that a successful crisis management system consists of both governance capacity and legitimacy, and that organizational arrangements together with the legitimacy of governmental bodies do affect crisis management.

Boin and Bynander (2016) argue that coordination has been identified as a critical failure factor in great disasters and crises. Simultaneously, improved coordination is also seen as the solution to the problem. There are several examples of crises where coordination has worked well, but the challenge is to analyze successes and problems with coordination since the lousy definition of the term and several conceptions create different assessments. Howlett et al (2017, p 492) capture that to be successful in encouraging citizens to engage and achieve cooperative forms, there must be a suitable setting where the government works as a facilitator and induces joint responsibility. Another policy perspective further shows that co-productions effectiveness is dependent on how able the top-down governance is and how it frames united action between different types of actors in ways that balance flexibility and accountability (Peters, 2010; Sorensen, 2012).

2.3 Research gap

Increasing collaboration is becoming an essential part of public management since societal problems are getting more complex (Keast, Brown, & Mandell, 2007; McNamara, 2012; O'Leary & Vij, 2012) and is an important factor to improve performances and reduce uncertainty (Emerson, Nabatchi, & Balogh, 2011; Koppenjan & Klijn, 2004). The challenges of collaboration in crisis preparedness are becoming increasingly complex since more policy

subsystems and societal tasks must engage in crisis preparedness management processes. Actors who have not worked together before are now expected to collaborate in a non-familiar crisis preparedness context (Deverell et al, 2019, p. 485). How governmental agencies work to effectively manage challenges through non-hierarchical collaborative processes needs further investigation (Comfort, Waugh, & Cigler, 2012; Hermansson, 2016; Waugh & Streib, 2006), and there have been requests for more research on this, and not only in the case of education-related activities, to be able to investigate and define outcomes across settings of collaborative crisis preparedness and what factors that could foster the performance for effective collaboration (Howlett et.al., 2017; Nohrstedt et al, 2018). Furthermore, there is a desire for additional information from a higher organizational level and more top-down perspectives in the planning for crisis preparedness (Borell et.al, 2018, pp. 410-411).

The literature described in this chapter explains why collaboration is important for crisis preparedness, and what challenges and factors for effective collaborative crisis preparedness previous research have discussed. This chapter has also presented a research gap regarding collaborative processes and the need for top-down perspectives in crisis preparedness.

3. Analytical Framework

This chapter will introduce the analytical framework and the thinking of New Public Governance (NPG). Previous research regarding limitations of the thinking of NPG and Swedish crisis preparedness are presented and based on these arguments, an explanation of how the collected data for this paper will be analyzed is captured.

3.1 The shift towards the thinking of New Public Governance

Studies has shown that there has been a shift from the traditional thinking of public administration, which included hierarchical governance practices, towards the global trends of NPM and market-based orientation and now, a transition toward the thinking of NPG with an increasing inclusive civil society (Howlett et.al., 2017; O'Flynn, 2007). According to researchers, Sweden has been impacted and influenced by the thinking of NPG since there has been a devolution of political power and policy steering has decentralized towards a more local influence and organizational changes resulted in shifts in responsibility from the state to individuals (Asp and Sjölund, 2014; Bergström & Rothstein, 1999; Carlsson, 2021; Larsson, 2019). Another argument for this shift is that MSB, a governmental agency, is asking for an increased commitment from central governmental agencies, regions, municipalities, trade, and industry, NGOs, and private individuals to collaborate to strengthen civil preparedness for crises and disasters (MSB, 2021c).

The emergent characteristic of NPG is the existence of a plural and pluralist state, where multiple actors contribute to both the delivery of public services and to the process of policymaking (Osbourne, 2010, p. 384). Co-production is one of the core ideas of NPG, which takes place between state and non-state actors, such as business and trade, NGOs, private actors, and individuals, to either inform or deliver public services. According to Pollitt and Bouckaert (2011) can co-production be seen as “... *to involve an effort to replace hierarchies and markets as central coordination institutions with tools built around networks of multiple actors engaged in “co-production”*” (Howlett et al, 2017, p. 492). The concept of co-production was first developed as something that underlined citizens' engagement in policy delivery, although the concept has emerged into something that both includes individuals and organizations that are collaborating with governmental agencies in the delivery and management of services (Alford 1998; Poocharoen and Ting 2015).

Figure 1. *The different PA reforms and their policy tools*

	Traditional public administration	New Public Management	New Public Governance
To whom	Subjects	Customers	Citizens
Main goal	Legitimacy and compliance	More effective, efficient and better-quality public service	More legitimate, inclusive, flexible and effective government
Characteristic	Bureaucratic	Post-bureaucratic, competitive styles	Post-competitive, collaborative styles
Dominant substantive policy tool	Direct provision by government	Contract out to private entities	Co-production <i>with</i> non-governmental actors and citizens
Key procedural management and policy tool	Rules and input-based management tools	Benchmarking and other output-based tools	Public participation and trust as key management tool
Accountability	Hierarchies	Market-driven	Multifaceted
Role of government	Rowing	Steering	Facilitating

Source: Howlett et al, 2017; O'Flynn, 2007.

As seen in *Figure 1*, the dominant characteristic of NPG is collaborative styles which include co-production. This collaborative style is defined as “*a concept that describes the process of facilitating and operating in multi-organizational arrangements to solve problems that cannot be solved or solved easily by single organizations* (Agranoff and McGuire, 2003, p. 4). The aim is to achieve common goals through working across boundaries, in multi-actor and multi-sector relationships with the influence of reciprocity (Bynander et.al., 2018, p. 257). Collaboration is not a static condition but instead a changing and emergent process. Compared to the definition of co-production, which is the concept of collaboration is overarching and includes all different types of relationships between actors who “get things done”. These actors originate from the private, non-profit, and public sectors combined and it is therefore argued that co-production should be categorized under the caption of collaboration (Bynander et.al, 2018, p. 258; Poocharoen and Ting, 2015, p. 589).

Several researchers argue that effective collaboration is a requirement for successful crisis preparedness since it is the only way to solve intractable problems within crisis management (Alford and Head, 2017; Cristofoli et al., 2017; Bynander and Nohrstedt, 2020; Bynander et al, 2018; Weber and Khademian, 2008). A central rule for ‘good governance’ is to invest and be

prepared for complex crises, such as natural disasters, and a cluster of responsible actors must be able to collaborate across territorial boundaries, jurisdictions, sectors, and levels of authority (Ansell et.al, 2010; Parker et.al, 2020; Parker and Sundelius, 2020).

Public administration composes the main part of government activity and employment. The leading activity in public administration is implementing regulations and laws, but there are also other several activities carried out in these public organizations which are crucial for a functioning administration (Peters & Pierre, 2003). By combining the strengths from both NPM and the traditional thinking of public administration, NPG identifies both the interrelationship and legitimacy of policymaking and the implementation delivery process. It also “*breaks new ground*” since it captures the plural world within public administration management that now consists of public services produced by both governmental and non-governmental actors. The thinking of NPG has therefore an essential advantage in the study of public administration management and provides a conceptual framework that could develop research and theory that give more knowledge regarding development within this field (Osbourne, 2006, p. 384).

3.2 Challenges to effective NPG

As increased collaboration between different actors is argued to be the solution for effective crisis preparedness (Boin et al, 2010; Kapucu, 2005; Nohrstedt et al. 2018; MSB, 2021c), the collaborative style which is a core component in NPG come with some challenges. As individuals get more able and resourceful, which might dominate processes of co-production, it could create resistance from experts in governmental agencies who have a hard time letting go of their former areas of responsibility (Bovaird, 2007). Another important challenge that is highlighted by several researchers is regarding accountability. It is argued that co-production increases public accountability for expected outcomes, and this would in turn result in governments no longer taking full responsibility for any policy failure and could instead shift blame for failure onto others (Poocharoen and Ting, 2015, p. 590). Other researchers (Christensen and Laegreid, 2012; Eikenberry, 2007; Lynn, 2012; Rouban 1999) have argued that reliance on NPG thinking could potentially blur accountability, strengthen the local elite and lead to divisiveness and inequality in policy processes. Since accountability is highlighted as a challenge of the NPG thinking, this will be more discussed in the next section.

3.2.1 Accountability

Social systems can be generally defined as a common set of shared expectations for actors' behavior. The one thing that is said to bind these social systems together is accountability. The capacity to call individual actors, agents, or organizations to be accountable for actions is needed for social order and shared expectations (Frink and Klimoski, 2004, pp. 2-3). Therefore, accountability involves that someone is answerable to evaluation or observation by some other audiences. The focus is to look at the management of decisions or behavior that is conducted by the agent under its control or under responsibility (Frink and Klimoski, 2004, p. 4). Christensen and Laegreid (2012) explain that the thinking of NPG and its network model have great flexibility and adaptability, but that accountability and its meaning will be reduced and unclear when under the influence of the NPG thinking. The researchers explain that the concept of accountability in the traditional hierarchical model is mainly connected to political sovereigns on the top, but the thinking of NPG will make this model of strictly hierarchical responsibility less applicable (p. 3). Both public and private actors will now have the responsibility to be accountable upwards, horizontally, vertically, and downwards and face different kinds of accountabilities of which they have less knowledge. The researchers suggest that the thinking of NPG should be a supplement to the traditional welfare state hierarchy. Accountability relations will then still be challenged but coordination will be more effective (pp. 4-5).

Lynn (2012) explains that the influence of NPG has given attention to the increasingly complex relationship between actors organized at different territorial levels and with that, enhances the discussion of accountability in contemporary decision-making (p. 9). A researcher that is discussing accountability within NPG is Peters (2010), which argues that accountability is one of the core challenges in the transition towards NPG thinking. The new reforms that this could bring do not only weaken the capacity to control government but could also decrease the evaluation elements of accountability. When weakening the linkages between political leaders and policy delivery, since there are now other organizational and non-public partners that can supply it, there will also be a loss of control and learning (p. 43). Thus, as Howlett et.al (2017) argues, to have an effective collaborative style of public administration, there must be a suitable setting where the government works as a facilitator and induces joint responsibility.

3.2.2 Division of responsibilities

To recognize accountability, one must first be given responsibility. Scholars from the Swedish Defence University left comments to the *SOU: 2021:25, Struktur för ökad motståndskraft*, and explain that the principles and division of responsibilities that create the foundation of Swedish crisis preparedness are insufficient and create gaps. The civil defense, which includes all actors in a society i.e., governmental agencies, municipalities, NGOs, trade and industry, and individuals, is not adapted to carry out the role it is given in the legislation. The suggestion is that there must be a new, hierarchical structure for crisis preparedness where the role of governmental agencies must be clarified and that these actors must take on a greater role in crisis preparedness (Försvarshögskolan, 2021).

Fredrik Bynander is an Associate Professor at the Swedish Defence University and Director of the Centre for Societal Security and criticizes one of the core principles of crisis management, the principle of responsibility. In an interview for *Sveriges Radio* in 2021, Bynander explains that a crisis creates problems and dilemmas that are not visible in normal situations and that we don't know of beforehand. Since the principle of responsibility states that actors who are responsible for an activity under normal circumstances also have the responsibility under societal disruptions, it does not include new situations which often emerge during a crisis. Therefore, there will be situations that are not covered by the principle of responsibility, and it is not clear who has the responsibility for such situations when they occur or in the preparedness before. In this way, the principle of responsibility creates gaps that could deteriorate and delay crisis management due to an unclear division of responsibilities. The principle of responsibility is a core problem that demonstrates that actors, governmental, non-state, and private, within crisis management do not have full control of problems that could occur (Sveriges Radio, 2021).

Without a clear division of responsibilities, it would also lead to unclear accountability where actors shift blame for failure onto others (Poocharoen and Ting, 2015, p. 590). According to both examples presented in this part, the responsibility for Swedish crisis preparedness has been outsourced since responsibilities are given to not only state actors, but also to non-governmental actors, private, business, and individuals, which is in line with the characteristics of collaborative style and co-production in NPG. A challenge that comes with this is the division of responsibilities within crisis preparedness and changed legislation, where governmental actors take on a greater role.

To answer the research question *is NPG taking place in Swedish crisis preparedness*, the analytical schema is built upon to look closer at the ideas within NPG. In addition to co-production and collaborative styles which is presented in detail above, findings will also be analyzed from the role of the government and the main goal. In NPG, the role of the government is to have a facilitating role which main goal is to be more legitimate, inclusive, flexible, and effective. The analysis will also look closer to whom these goals are directed at, which in NPG is citizens, and how the accountability is presented in the findings. In NPG, accountability is multifaceted, and the key management policy tool is public participation and trust. This analytical schema is influenced by the core ideas of NPG presented in *Figure 1*.

Moreover, to answer the research question *what are the factors that could foster an effective collaborative crisis preparedness*, the analysis will look closer at the highlighted challenges presented towards collaborative crisis preparedness in previous research and challenges presented to NPG, which are accountability and division of responsibilities. In addition, the analysis will evaluate factors relevant for effective collaborative crisis preparedness based on respondents' answers to these challenges. Data will be collected from interviews at a central governmental agency to get the top-down perspective and thoughts from a higher organizational level which researchers are asking for in the field of Swedish crisis preparedness (Borell et.al, 2018, p. 410-411).

4. Method and Material

4.1 Research design

The aim of this study is to provide deeper knowledge regarding the research problem and investigate how Swedish crisis preparedness is affected by the thinking of NPG and what factors there are for effective collaborative crisis preparedness. To answer the research questions, a case study on a single organization is accomplished and data will be collected through a qualitative method of semi-structured interviews. This study does form a descriptive research design since the research questions are formed in a way that provide answers to questions of *how* and *what*, instead of trying to understand *why* a phenomenon occurred. According to Esaisson et al. (2017, p. 37-38) is it important for the researcher in descriptive research to not only present interesting data and material, but also to achieve and produce something interesting out of the material. Descriptive research needs to consist of a conceptual apparatus, which in this study is the same as the analytical framework of NPG, that describes which concepts one should focus on when collecting data and how the collected data should be analyzed. With the help of the analytical framework in this study, the researcher should be able to draw different conclusions than what is directly captured in the material. Conclusions in this study can be questioned by other researchers who investigate the same research problem, with possibly a different or even more appropriate, analytical framework.

4.1.1 Case

Case study research consists of an intensive and detailed analysis of a single case and is interested in the nature and complexity of the case chosen (Bell et al., 2019). This study has a top-down perspective with a focus on MSB, which is a central governmental authority in Sweden. Data is collected from semi-structured interviews with employees at MSB, which work is connected to Swedish crisis preparedness in different ways. MSB was chosen as a case since I conducted my internship at the authority and had collected knowledge on what they work with and their role in crisis preparedness, therefore I knew that MSB would be an appropriate case to collect data from to answer the research questions. It was also an advantage that I have had my internship at MSB since when contacting possible respondents, I mentioned my time at the authority and which department I worked at, which arguably made me stand out

and get attention compared to other similar inquiries. Another advantage is that I also had been in contact with some of the respondents during my internship which could increase confidence and make respondents open up and give elaborated information that they might not give to a person that they have never met before.

Swedish crisis management is a broad area, and this study will therefore be limited to focus on crisis preparedness. The reason why this study focus on crisis preparedness is that the responsibility for the tasks is, according to principles and legislation, divided between several public and private actors. Crisis preparedness is therefore an area that is connected to public participation, which is the key management tool in NPG, and it would be socially important to analyse crisis preparedness from the perspective of NPG. To make it easier for the respondents to know what to focus on in crisis preparedness when answering the interview question, I choose to focus on crisis preparedness connected to natural disasters.

Moreover, the focus on crisis preparedness and natural disasters does also emerge from the research problem in this study, which is presented in chapter 1.1. During my internship at MSB, I noticed that natural disasters, disaster risk management and climate change is something that is discussed frequently at forums and meetings. According to the IPCC report published in 2021, *Climate Change 2021: The Physical Science Basis*, global warming will lead to more extreme weather such as heavy rainfall, heat waves and extreme drought. In recent years, we have seen both wildfires and floods in Sweden which has left marks in the crisis management systems. Based on this evidence, I choose to focus on crisis preparedness related to natural disasters since it is a current theme that researchers argue that we must be prepared for since it will occur more frequently.

4.1.2 Primary data: semi-structured interviews

Semi-structured interviews are the main method of this paper. In the interview method, the goal is not to reach a data material that should be able to generalize over a population, but that people are interviewed for their different perceptions and thoughts, which are then studied. The interviews are designed according to the principle of semi-structured interview, which means that the researcher has topics that should be touched on and from this list there will be questions related in order to cover the specific topics. The advantage is that the interviewee can naturally approach different themes, speak more freely, and get a great space in how to reply. The

interview process will also be more flexible and as a result, questions that are not included in the list are asked since the interviewer did pick up things that were said by the interviewee and asked questions based on this to gain a deeper understanding (Bell et.al, 2019, p. 436). The list in this paper is referred to the *interview guide* and could be found in *Appendix 1*. The questions that are outlined in the guide may not be asked and answered in the same order in each interview, but all the questions in the interview guide will be asked and touched upon. There is also a similar wording used by the researcher between all the interviewees. The reason why this study draws on semi-structured interviews is that to answer the research questions for this paper, the data collected needed to consist of deep insights into people's experiences, feelings, and opinions. The interviews will provide a greater depth to this paper's analysis and therefore would be more effective to use this method (Lilleker, 2003, p. 208).

In this paper, the interviewees were chosen according to a snowball technique. This approach is frequently used in interview-based research and means that the researcher relies on the respondents to suggest other attainable respondents, which creates a snowball effect since the ball gets bigger as each respondent joins (Christensen and Gerring, 2017, p. 57). I started to contact the first two respondents which I had contact information on. These interviewees then gave information on people that could fit my study and have been working with crisis preparedness and natural disasters before. In the search for respondents, I received both rejections and agreement to conduct interviews. The reasons for the rejections, from the ones that gave me an answer, were because of lack of time and because they did not think that they could contribute in a valuable way to the study. The sample thus contains a breadth of different actors within MSB that work in different departments, but with the aim of being able to answer questions related to collaborative crisis preparedness and natural disasters in the Swedish context. The interviewees together offered a range of perspectives on the same problems, which in turn gave me the ability to identify different challenges and factors for effective crisis preparedness. All interviews were conducted online, through Skype or Microsoft Teams, or by telephone. The table below, *Table 1*, presents the respondents from MSB, their role at the authority, the place of the interview and the date and length. The information is limited to ensure their anonymity.

Table 1. *List of all interviewees from MSB with information*

	Role at MSB	Place	Date/Length
Interviewee 1	Coordinator/Senior Advisor	Teams	220210, length 37:13
		Teams	220406, length 17:50
Interviewee 2	Coordinator/Case Officer	Teams	220216, length 54:28
Interviewee 3	Head of section	Skype	220218, length 38:36
Interviewee 4	Head of section	Skype	220221, length 25:48
Interviewee 5	Head of section	Telephone	220301, length 26:59
Interviewee 6	Case Officer/Duty Officer	Skype	220421, length 33:34

4.1.3 Secondary data: documents, articles, videos

In this study, several sources of secondary data are utilized. These sources range from official Government commissions of inquiry (SOU series), publications from MSB, other evaluations and to relevant newspaper articles. The secondary data was mainly used to shape the analytical framework and aid in the formulation of relevant interview questions. Secondary data was also

used to verify findings from the interviews, through triangulations, which *is the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena* (Patton, 1999). Some of the material was identified prior to the interviews taking place while others were recommended during contact with interviewees. Below a list of the main sources of secondary data is presented:

SOU series:

- *SOU: 2021:25, Struktur för ökad motståndskraft,*
- *SOU 2005:104, Sverige och tsunamin – granskning och förslag*
- *SOU, 2020:80, Äldreomsorgen under pandemin*
- *SOU, 2021:89, Sverige under pandemin volym 1 och 2*
- *SOU 2007:31, Alltid redo! En ny myndighet mot olyckor och kriser,*
- *SOU 2022:10, Sverige under pandemin slutbetänkande*

Material from MSB:

- *MSB (2018). Gemensamma grunder för samverkan och ledning vid samhällsstörningar [pdf]*
- *MSB (2021). Strengthening civil preparedness. [pdf].*
- *MSB (2014). The MSB's work in relation to natural disasters. [pdf].*
- *MSB (2015). Vägledning för arbetet i samverkansområdena. [pdf].*
- *MSB (2020). Hela Sverige tillsammans – En liten film om krisberedskap och civilt försvar [Video].*
- *MSB (2016). Ansvar, samverkan, handling: Åtgärder för stärkt krisberedskap utifrån erfarenheterna från skogsbranden i Västmanland 2014 (Ju2015/1400/SSK),*
- *Gornitzka Petri, C. (2022). Ökat tempo för bättre beredskap. Dagens Industri. [article]*

In addition, material from other governmental agencies, international organizations and reputable news sources are used in the study to provide context and clarification.

4.2 Research process

In chapter 6 will the interviewees view on collaborative crisis preparedness be presented and analyzed with the help from previous research and the analytical framework. The answers from the interviewees were codified, or clustered, with the help of the interview guide's five themes whose main lines of division originated from this study's analytical framework. The analytical framework is clarified in *chapter 3, Figure 1* and the interview guide could be found in *Appendix*. The aim of the questions in *Theme 1* is to ensure that the respondent is relevant for this study and have experience of crisis preparedness and natural disasters. Furthermore, these questions also aim to receive information to whom MSB is working towards, and the main goals connected to crisis preparedness. Both of these factors are included in the analytical schema. Questions in *theme 2* and *3* is formulated based on the factors of accountability and the role of government, which could be found in the analytical framework, and questions in *theme 4* and *5* is formulated to analyze findings related to characteristics, policy tools and key procedural management in Swedish crisis preparedness compared to the analytical framework.

After the findings had been codified and structured according to the analytical framework and the interview guide of this study, a 'thematic analysis' was performed, defined as a search for common *themes* (Bell et al., 2019, p. 519). The recommendations by Ryan and Bernard (2003) were used when searching for themes, which include investigating repetitions, similarities and differences and theory-related material. The success of the intensive form of analyzing a case is to create a 'good narrative'. This could be achieved through focusing on specific events and details from the collected data and discussing this in a way that captures contradictions and complexity of real life (Flyvbjerg, 2006, p. 237).

4.3 Method discussion

There are important things that one needs to have in mind while interviewing in order to get the information with the right purpose (Lilleker, 2003, p. 207). The interviewer should take in a non-leading way, and ask questions based on a neutral tone (Rapley, 2001, p. 310). Simultaneously, a great strategy is to ask the questions in a way that encourages the interviewee to speak about the subject by themselves and that the interviewer uses as little prompting as

possible (Smith, 1995, pp. 13-25). Rapley (2001) argues that whatever strategy one uses, there is no better practice that will result in “better data” compared to other practices. The data collected from conducting interviews are deeply dependent on and will emerge from the interactional context which will be performed in and throughout the talk between the interviewee and the interviewer. Awareness of this sensitive, local context is central when analyzing interview data, regardless of which analytical tool the researcher is using.

Bell et al. (2019, p. 64) emphasize that qualitative case studies should relate to three different criteria's: reliability, replicability, and validity. Qualitative interviews have some limitations, and the primary collected data should therefore be strengthened by additional secondary data (Lilleker, 2003). The primary data in this paper is collected from 6 original interviews and all of the interviews were recorded, which enabled the author to return to the recorded material to ensure that interpretations of the material were supported by the respondents' answers. This is connected to the criteria of reliability, that the study provides a fair and real picture of the different perceptions and perspectives that existed in the different interviewees (Bell et al., 2019). Due to the impact from the Covid-19 pandemic, employees at MSB were not back at the office full-time and it were therefore easier to have the interviews digitally or by telephone since some of them worked at home. To increase reliability even more in this study and make sure that there have not been any systematic errors (Esaiasson et.al, 2017, p. 64), I carried out a complementary interview with one of the respondents and reached out to several of the respondents by email to ask complementary and verifying questions.

Moreover, validity of the data was strengthened by the usage of secondary data since there is a connection between previous research, evaluations, documents, and the thinking of NPG, which strengthens the theoretical point of departure. The aim of this is to make sure that this study measures what it aims to do. In the process of selection of secondary data, it cannot be ruled out that certain documents that could have been relevant for the study were not considered as the selection process was selective about the purpose and controlled by limited time (Esaiasson et al., 2017). There has not been any material that has been actively deselected to provide support for interpretations made. The goal of this study is not to generalize, but rather to particularize. Delving deeper into specific details of this case, a rich description of the case is provided. Therefore, readers are encouraged to judge for themselves regarding the degree of

replicability to other contexts and scenarios. However, the researcher is responsible for ensuring that the implementation of the research is transparent and consistent.

5. Background

To get an understanding of the case of Sweden, this chapter will discuss, first, the Swedish public administration and how it has been developed in recent years, and second, the history of crisis management in the Swedish system of governance and the development of Swedish crisis preparedness. To understand why MSB is an important actor in Swedish crisis preparedness, this chapter will also include an explanation of the agency's work and its role in crisis preparedness. Since the focus in this study is limited to crisis preparedness connected to natural disasters, there will also be a discussion of the term natural disasters used in this study.

5.1 Swedish public administration

Public administration has undergone extensive reforms in the past decades, which very few aspects of society have ever seen. Much of the administrative reforms that have been implemented have created progress from the ideal type and model of bureaucracy as explained by Max Weber, in which highly structured hierarchical authorities are included. Sweden has undergone dramatic changes in its public administration. Reforms throughout the 1980s and 1990s continued to decentralize an already decentralized state and researchers argue that the capacity of central administrative agencies in Sweden has declined simultaneously as policy steering was decentralized for local influence (Bergström & Rothstein, 1999; Carlsson, 2021; Larsson, 2019; Lindvall & Rothstein, 2006; Pollitt & Bouckaert, 2011, p. 51). This reshapes continued in the 1990s and followed throughout the 2000s with a strengthening of civil society, individual choice, and private initiatives (Lindvall & Rothstein, 2006).

According to Larsson (2019), organizational changes resulted in responsibility shifts, from the state to individuals. This shift of responsibility has not taken place through force or disciplinary tactics, but instead through strategic techniques from the government. Asp and Sjölund (2014) analyzed different public documents between the years 2001 and 2013, such as investigations, evaluations, bills, and governing documents. These documents capture that great importance is attached to the public being informed about the crisis management system and the division of responsibilities (p. 99). The devolution of political power has further produced some accountability problems and the leaning toward multi-level democracy follows the trends steering from traditional public administration (Lindvall & Rothstein, 2006). Inspired by the global trend of NPM, reforms had a greater emphasis on how different business techniques

could improve efficiency and how this could solve a wide range of problems. The practice of NPM is to give performance outcomes bigger attention, treating those who use the services within a society as customers and injecting a widespread market-type mechanism (Pollitt & Bouckaert, 2011, pp. 10-11).

The Swedish system of government administration is divided into three different levels: national, regional, and local. At the central level is the Riksdag (the Swedish Parliament) which represents the Swedish people and is the legislature. The Government implements decisions from the Riksdag and is assisted with help from Government offices, consisting of several ministries, and from central government agencies which are around 400 in total, including MSB (Regeringskansliet, 2015a).

The regional level in Sweden is divided into 21 counties, or regions. At this level, political tasks are carried out by both the county administrative boards, which are elected by the government, but also from people who are directly elected by the Swedish people (Regeringskansliet, 2015b). Regions have the responsibility for huge geographical areas and some of the responsibilities are healthcare, regional development, tourism, education, and to some extent dental care (SKR, 2021b). On the local level, Sweden is divided into 290 municipalities which are governed by elected assemblies (the municipal council) that are responsible for several things such as social care (elderly and disabled care), environmental and health protection, cleaning and waste management etc. (SKR, 2021a).

5.1.1 Crisis management and the Swedish system of governance

The secretariat for crisis management was established in 2008 at the national level under the Prime Minister's office. This establishment was seen as a reaction to the critique the government received for the management of the tsunami in 2004 (SOU 2005:104, *Sverige och tsunamin – granskning och förslag*). After the change of government in 2014, the secretariat was moved to the Ministry of Justice but since the Covid-19 outbreak, the Government has yet again received critique for the Swedish crisis management (SOU, 2020:80, *Äldreomsorgen under pandemin*; SOU, 2021:89, *Sverige under pandemin volym 1 och 2*). In a statement of government policy in late 2021, the newly appointed prime minister Magdalena Andersson announced that she will move back the secretariat for crisis management to the Prime Minister's office to increase control over crisis management (Björkman et.al, 2021).

Within the area of crisis management, there is also crisis preparedness, which is the ability to prevent, resist and handle different situations in crisis. The aim and purpose of Swedish crisis preparedness are to protect the critical functions of society, protect the health and life of the population and uphold fundamental values such as democracy, human rights, and rule of law. Any questions related to crisis preparedness will go to the Ministry of Justice (Regeringskansliet, 2022). Municipalities, county administrative boards and the Government have a geographical responsibility to coordinate crisis preparedness within their area of responsibility. Governmental authorities do have a sectoral responsibility for their accountable issues which refer to regardless of the geographical location of an issue, in the event of a crisis the authority must primarily provide expertise and resource support to regional and local actors (MSB, 2015).

There are three laws in Sweden that regulate crisis management and preparedness. The first ordinance (2006:637) is regarding actions for municipalities and regions and it regulates crisis management at these levels. Each municipality and region must have a special crisis management board that could take over and do the work of the ordinary boards if a crisis were to happen. The second and third ordinances (2015:1053, 2015:1052) are for governance at the central level. These laws stipulate obligations regarding total defense and heightened preparedness, which is under the Ministry of Defence, and crisis preparedness, which is under the Ministry of Justice (Krisinformation, 2021). Together with these ordinances, there are three core principles which has been proceeded from various evaluations, investigations and proposals that settle the foundation of crisis management:

The principle of responsibility: “those actors responsible for an activity under normal circumstances retain this responsibility in the event of societal disruptions”.

The principle of proximity: “societal disruptions shall be managed where they occur and by the responsible actors most closely involved”.

The principle of similarity: “actors are not to make changes to their organisation that are more far-reaching than the situation demands. Accordingly, in the event of societal disruptions, operations shall function as they do under normal circumstances, to the extent possible” (MSB, 2021c, p. 33).

5.1.2 Development of Swedish crisis preparedness

In the year 2002, several changes emerged that did settle the foundation for the contemporary crisis preparedness system in Sweden. The Swedish government had come up with the proposal *Samhällets säkerhet och beredskap* (2001/02:158), with the aim to get a comprehensive view of security and vulnerability in Swedish society. In the upcoming decade, Swedish crisis preparedness went through various tests on all levels within the society: the murder of the Minister of foreign affairs, Anna Lindh (2003), floods in Småland (2004), the road and railway landslide in Bohuslän (2006), the flu A(H1N1) in 2009, the oil spill at the island of Tjörn (2011), wildfires in Västmanland (2014), the terrorist attacks in Paris (2015), the migration crisis (2015) and the wildfires throughout the summer of 2018 in Sweden (Eriksson, 2017; Försvarshögskolan, 2019, p. 71). However, two events happened right after the new changes in 2002 which left traces in Swedish crisis preparedness and contributed to further development within the system.

First, it was the tsunami in December 2004 in south-east Asia which took the life of 543 Swedes in the middle of Christmas celebrations. Two weeks after, at the beginning of 2005, the storm Gudrun swept in over Sweden and caused severe damage in various municipalities. 150 million trees fell and over 500 000 people were left without electricity. These two events paved the way for further investigation and evaluation of Swedish civil preparedness. The SOU 2005:10, *Sverige och tsunamin – granskning och förslag*, concluded that Sweden needed a national crisis management unit at the Government office to deal with crises better and to increase coordination between central authorities. It was debated that Sweden had major shortcomings in its crisis management and crisis preparedness and that the Government Offices were badly organized which deteriorated and delayed crisis management (SOU 2005:10). Resources for operations such as equipment, personnel, and transport did exist but were not used with the speed the situation called for. The collaboration with NGOs, volunteers, and travel companies would be better if there were better preparations. Overall, If Sweden was better prepared, the damage could have been limited. The principle of responsibility was also criticized for being unclear and even deteriorating crisis management since communication from responsible authorities, that they were unable to solve a crisis on their own, was delayed (SOU 2005:10, pp. 294 - 295). After investigations from 2005 to 2008 on how to create a better crisis preparedness system, it was decided that a crisis management office would be set up at the

Prime Minister's Office to clarify and improve Swedish crisis management (Försvarshögskolan, 2019, pp. 72-73).

Simultaneously, the government decided to investigate three authorities and their operations: Krisberedskapsmyndigheten, Styrelsen för psykologiskt försvar (SPF) and Statens räddningsverk (SRV). Conclusions of the investigation were featured in the final report SOU 2007:31, *Alltid redo! En ny myndighet mot olyckor och kriser* and suggested that the three authorities should emerge into one. The government agreed and their proposal 2007/08:92, *Stärkt krisberedskap – för säkerhets skull* was approved in 2008. This resulted in the establishment of the Swedish Civil Contingencies Agency (MSB) in 2009 as a new central government authority. MSB took over the work from the three other authorities as they were shut down (Försvarshögskolan, 2019, p. 74). In 2014, the newly elected government moved the responsibility for Sweden's crisis preparedness from the Ministry of Defence to the Ministry of Justice. Simultaneously, the new ministerial post of Minister for Home Affairs was established, and the crisis management office mentioned before (that was set up at the Prime Minister's Office) was now moved from the Prime Minister's area of responsibility to the Ministry of Justice and the Minister for Home Affairs responsibility (Försvarshögskolan, 2019, p. 84).

In the summer of 2014, there were severe forest fires in the county of Västmanland which resulted in a comprehensive rescue effort that is seen as the biggest one in Sweden in modern times. Sweden was yet again tested at all levels and governmental, private, individuals and international actors gave their support. Asp et.al (2015) conducted the evaluation *Bara skog som brinner? Utvärdering av krishanteringen under skogsbranden i Västmanland 2014* after the wildfires in Västmanland, Sweden, in 2014. The conclusions from the report came up with that there are several deficiencies in the connection between legislation and the principles within the system in connection to the capacity of actors at the central level and their readiness to carry out their missions.

Another report by the Government commissions of inquiry was published in 2021, SOU 2021:25, *Struktur för ökad motståndskraft*, which explains that to achieve functionality within the Swedish society, responsibilities should be divided more distinctly, and that this division should consist of several sectors which each have a responsible authority. This means that the principle of responsibility should still apply, but the purpose of each responsible authority in

the sectors is to coordinate, plan and specify tasks in situations of crisis. This should be done in both peacetime crises and events of heightened preparedness (pp. 184-186).

As explained above, Swedish crisis preparedness has gone through different developments and the system has been exposed to different events. The whole world has been facing a pandemic, Covid-19, that has been causing health crises, and mortality and affected other aspects of society, such as social and economic disruption (WHO, 2020). The government of Sweden decided in 2020 to appoint a government commission of inquiry and the Commission's final assessment, which is based on what has been found in its inquiry, was published in late February 2022. The report concluded that responsibilities for disease prevention and pandemic management are divided among several different actors and that this system is both challenging to manage and involves insecurity since individual actors are getting responsibilities but are disregarding the national consequences of different measures they decide to take. There is also a risk that the actors responsible for something in a crisis are having a hard time shouldering that responsibility when it's time and cannot explain the difficulties it experiences. The report does also conclude that crisis preparedness, that is organizational, material, legal and mental, must be strengthened before the next crisis. The principles of crisis management should also be supplemented since they are not sufficient, and the organization of crisis management should be examined further (SOU 2022:10).

Swedish public administration has undergone reforms that has contributed to the progress from the ideal type of bureaucracy towards a more decentralized state. The core of Swedish crisis preparedness is grounded into the principles of responsibility, proximity and similarity, and since the 2000s the issue of crisis preparedness has been high on political agenda and in public discourse. The next section will look closer into the case and focus of this study.

5.2 MSBs role within Swedish crisis preparedness

MSB is a Swedish authority that has responsibility for issues regarding emergency management, civil protection, and public safety when no other authority covers it. MSB takes measures before, during, and after crises or emergencies (MSB, 2019b). Moreover, MSB was established in 2009 when three other authorities (Krisberedskapsmyndigheten, Styrelsen för psykologiskt försvar (SPF) and Statens räddningsverk (SRV)) emerged into one. The governmental department that is responsible for MSBs operations is the Ministry of Justice and

the work is led by a Director General (DG) that has been selected by the Swedish Government. The authority has around 1 000 employees stationed both in Sweden at different offices (Stockholm, Karlstad, Revinge, Sandö, and Rosersberg) but also employees appointed in missions abroad all around the world (MSB, 2021a).

The overall goal for the agency is to assure that all levels of society achieve safety and security. To achieve this goal, MSB carries out its work through regulations, training, support and knowledge enhancement in close cooperation with other authorities, municipalities, county councils, several organizations, and the private sector (MSB, 2021c, p. 35). MSB has an agreement together with the Swedish Association of Local Authorities and Regions (SALAR) which works for the interest of all municipalities and regions in Sweden. The agreement, *Överenskommelse om kommunernas krisberedskap 2019-2022* (MSB 2018-09779, SKL 18/03101) consists of how to strengthen crisis preparedness and what roles different actors have within that field.

MSB has an important role to develop collaboration between actors within crisis preparedness and a meaningful platform are the collaboration conferences where MSB brings together a great number of participants from various authorities, organisations and alternative actors involved. These conferences are held every week and the aim is to maintain a good ability between actors to collaborate and develop Swedish society's capacity to prevent and manage consequences from crises. To reach individuals and actors on a more local level, MSB is responsible for information on the webpage *krisinformation* where the public can get access to reliable and fast information about crises. This comprehensive information is collected from different authorities and contributes to maintaining public confidence in the authorities' ability to handle crises (MSB, 2022b).

After a crisis is it important to conduct research and evaluations that could develop Swedish crisis preparedness. After the wildfires in 2014, MSB received the mission to evaluate Swedish crisis preparedness from the government. The agency presented a proposal to the government in 2016 on how the field of crisis preparedness could develop (Försvarshögskolan, 2019, pp. 89-90). The suggestion was that two of the core principles for crisis management, *the principle of proximity* and *the principle of similarity* should be replaced by two new principles whilst *the principle of responsibility* should be maintained. The new ones should instead be *the principle*

of collaboration and the principle of action. Information on the core and new suggested principles from MSB is presented in Table 2 below.

Table 2. *Suggestion on new principles from MSB in 2016*

The three core principles of crisis preparedness	MSBs suggestions in 2016 for the core principles of crisis preparedness
The principle of responsibility: those actors responsible for an activity under normal circumstances retain this responsibility in the event of societal disruptions.	The principle of responsibility: those actors responsible for an activity under normal circumstances retain this responsibility in the event of societal disruptions.
The principle of proximity: societal disruptions shall be managed where they occur and by the responsible actors most closely involved.	The principle of collaboration: actors affected by a crisis must work together with each other to ensure good coordination and efficient use of resources.
The principle of similarity: actors are not to make changes to their organization that are more far-reaching than the situation demands	The principle of action: actors must act proactively and take the necessary measures even in uncertain situations with a lack of information.

Source: Försvarshögskolan, 2019 p. 90; MSB, 2016; MSB, 2021c, p. 33.

MSBs' suggestion for strengthened collaboration in crisis preparedness could be connected to the thinking of NPG since they suggest that actors, governmental, NGOs, private, and individuals, must work together to ensure efficient use of resources and deliver public services. This suggestion is an example of co-production since it underlines the engagement of actors, described above, collaborating with governmental agencies in the delivery and management of services (Alford 1998; Poocharoen and Ting 2015).

Another example of MSBs role in crisis preparedness is that in 2018, simultaneously as the “crisis preparedness week”, MSB sent out the brochure *om krisen eller kriget kommer* to five million households. The brochure aimed to increase knowledge among citizens on how to be better prepared for the consequences of different extraordinary events such as extreme weather, military conflicts, serious accidents, or cyber-attacks (MSB, 2019a). Again, MSB was influenced by the thinking of NPG since they wanted to inform individuals about their responsibilities. This example has a characteristic of the collaborative style since MSB asks for *multi-organizational arrangements to solve problems that cannot be solved or solved easily by single organizations* (Agranoff and McGuire, 2003, p. 4).

5.3 Natural disasters

Research shows that climate change will increase in all regions around the world in the upcoming future and that natural disasters will be more likely to happen. The Intergovernmental Panel on Climate Change (IPCC) is a UN body that evaluates science related to climate change. The panel consists of a great number of scientists who volunteer their time to create comprehensive summaries of contemporary research regarding driving factors of climate change, future risks and the impact from it, and how mitigation and adaptation could reduce these risks. The reports are reviewed in various stages to achieve transparency and objectivity. The sixth assessment IPCC report that was published in late 2021, *Climate Change 2021: The Physical Science Basis*, concludes that the effects of climate change will increase simultaneously with further warming of the climate. This includes intensifying severe rainfalls, floods, sea-level rise, erosion, heatwaves, and droughts.

The increasing effects of climate change will further increase the chances of natural disasters. The definition of natural disasters is, according to MSB, “*natural events that entail negative consequences for life, property and the environment*” (MSB, 2014, p. 2). The term natural events refer to landslides, floods, heatwaves, etc., which all will occur more frequently and to a greater extent compared to before. To prepare and adapt the Swedish society against natural disasters, MSBs' role is to support municipalities and county boards in their work to prevent, manage and identify natural disasters and help them undertake their responsibilities. The authority provides maps for areas at risk, grants for preventive actions, research within the field, training, and exercises. MSB is also responsible for a national platform for disaster risk reduction (DRR) where collaboration between different authorities and organizations is held.

This allows actors within the Swedish society to be prepared and to work in prevention in response to natural disasters (MSB, 2014).

In 2018, the Swedish government appointed a national council of experts for climate change. Their role is to evaluate the work for climate change adaptation in Sweden and give suggestions for future developments in reports every five years. The first report was released in early 2022 and advocates for challenges in regard to climate change adaptation must be included in crisis preparedness and continuity of work. This includes clarification of the division of responsibility regarding security issues connected to climate change in relevant strategies. The report does also suggest that changes in the legislation should be evaluated to see how they could create better preparedness within the field. The current organization and division of responsibility are insufficient and cannot ensure that essential adaptation measures are taken. Crisis preparedness that is connected to climate-related risks must be increased, according to the council (SMHI, 2022).

The two sections above have introduced the role of MSB in Swedish crisis preparedness, which is to take measures before, during, and after crises which could for example include the mission to evaluate Swedish crisis preparedness. MSB does also have an important role to develop collaboration between actors within crisis preparedness. The term ‘natural disasters’ has been introduced and research that argues that increasing effects of climate change will further increase the chances of natural disasters has been presented.

6. Analysis and findings

To answer the first research question, *is NPG taking place in Swedish crisis preparedness*, the first section will present findings on that core ideas of NPG are taking place in Swedish crisis preparedness. The analytical schema which consists of ideas from NPG is presented in the *analytical framework chapter* and in *Figure 1*, and this section will present findings related to the these. To strengthen the analysis, findings from both publications by MSB and from the answers of the interviewees will be presented. Moreover, the first section will include findings from the questions under the headline *collaboration* in the interview guide and publications from MSB. In each section of this chapter, findings from the interviews will be compared and analyzed with the help of previous research and the analytical framework in this paper.

6.1 Is NPG taking place in Swedish crisis preparedness?

As explained in chapter 2, researchers are arguing that collaboration between different actors is a key factor for effective crisis preparedness and that crises need capacity from not only one single public actor but, requires collaboration between different levels of government (Alford and Head, 2017; Cristofoli et al., 2017; Nohrstedt, 2018; Weber and Khademian, 2008). In the publication *Strengthening civil preparedness* published in 2021, the authority concludes that Sweden's civil preparedness must be strengthened, that collaboration is required and "*For each and everyone, we must strengthen our preparedness for disasters, crises, and war. These efforts will require the commitment of national government agencies, county administrative boards, regions, municipalities, trade and industry, other organisations, and ultimately, private individuals such as yourself*". This is an example on that NPG is taking place in crisis preparedness in different ways. First, the document is asking for co-production between non-governmental actors and citizens, which is one of the core ideas of NPG. Second, the accountability is clear multifaced since the collaborative style asked for is between several actors in different political levels.

The Director General at MSB, Charlotte Petri Gornitzka, did also write an article *Ökat tempo för bättre beredskap* in the magazine *Dagens Industri* on March the 13th, 2022. In the article, Gornitzka asked for increased involvement of trade and industry in crisis preparedness planning and that organizations, businesses and governmental authorities should collaborate and share experiences for effective crisis preparedness. Gornitzka concluded that operations on all levels

need to review their vulnerabilities and work together to strengthen preparedness for accidents, crises, and war. Moreover, the governmental authority did publish a video on YouTube in February 2020, *Hela Sverige tillsammans – En liten film om krisberedskap och civilt försvar*, where the authority explains that if a crisis occurs, the most important thing will be our capacity to collaborate. The video continues and illustrates that everyone in Swedish society has a role in crisis preparedness and if everyone from individuals to governmental authorities collaborates, then we could handle crises more effectively (MSB, 2020). Co-production and collaborative styles are characterized in these findings since these are asking for multi-organizational arrangements in crisis preparedness and these arrangements should be between ‘everyone’, such as from individuals to governmental authorities, which will result in that accountability for crisis preparedness is multifaceted.

The findings presented above from a publication, an article and a video, support that NPG is taking place in Swedish crisis preparedness. The next step is to present findings from the interviews with the goal to evaluate this preliminary finding. When the interviewees were asked the question if they thought that collaboration between different actors (governmental and non-governmental) is needed in crisis preparedness, the results capture a joint agreement that this is the case. One of the interviewees, a head of section, explained that:

“We are living in a society which is not built on hierarchical structures since it is highly complex with a huge variety of different actors and a huge part of the society is owned, for example some critical infrastructures which we are all dependent on, these are privately owned and owned by several different businesses. It is obvious that we must get them on the same boat to be able to work together. We are highly interrelated and because of this, it is obvious that everyone must help each other in order for it to work”
(Interviewee 4).

Interviewee 4 indicates that crisis preparedness is a part of a complex and interrelated system where businesses and private actors must be included, which is a great example on co-production. Scholars argue that there is a need to outsource, or decentralize, management and preparedness to a growing number of actors and interests (Bryden and Caparini, 2006), which could be connected to the ambition that different actors must be included in crisis preparedness, “*get them on the same boat*”, with the aim to work effectively together. *Interviewee 3* explained that private actors do already maintain a great part of our society’s capacity and certain critical

infrastructure; therefore, they need to plan for continuity within their operations as there are several inherent dependencies between actors in Swedish society (Interviewee 3). This findings are related to the multifaced accountability since the inherent dependencies between actors in the Swedish society. Another respondent said that knowledge about crisis preparedness must be decentralized to other actors in our society, and not only to governmental authorities since everyone is interrelated with each other. There is no other alternative than to collaborate within such a complex system which is our society (Interviewee 4). Previous research argues that since the 1990s, Sweden has strengthened individual choice, private initiatives, and civil society (Lindvall & Rothstein, 2006) and that crisis management nowadays is dependent on greater professionalization (Streib and Waugh, 2006). *Interviewee 2* explains that a variety of private actors or businesses own critical operations in Sweden, such as health care preparedness or land, which the whole country is dependent. A variety of actors needs to both take a part in crisis preparedness and do certain parts in it. There are already several private actors that are selling their services to governmental actors since they are public customers and governmental actors are not practitioners themselves as the order services (Interviewee 2).

The ideas in NPG, that both individuals and organizations are collaborating with governmental agencies in the delivery and management of services (Alford 1998; Poocharoen and Ting 2015) is highlighted in the preparedness for natural disasters. One of the respondents explain:

“From a preparedness perspective, in order to reduce the risk, it will be required to work across borders, climate change and its consequences are stretching cross-border in nature, and this will require solutions that are cross-border in the sense of both national, regional, organizational boundaries and so on “(Interviewee 2)

In addition, *Interviewee 5* explained that there has been a broad project within MSB since the end of last year where people work to update the version of ”*Gemensamma grunder för samverkan och ledning vid samhällsstörningar*” (2014). The respondent described that the report illustrates how management and collaboration are to be carried out in the crisis management system and needed an updated version. This is an extensive project with the aim to raise and further develop collaboration and interaction between different actors and political levels (Interviewee 5). When reading the description of the project at the website, it is said that the development of this project takes place in what is called "co-production", together with partners at central authorities, county administrative boards, regions, municipalities, business,

and voluntary organizations (MSB, 2020). As explained in the analytical framework chapter, co-production is one of the core ideas of NPG which describes when individuals and organizations are collaborating with governmental agencies in the delivery and management of services (Alford 1998; Poocharoen and Ting 2015). This finding is further related to that the role of the government should be to facilitate, which MSB is doing by working on a project towards different actors and political levels to further develop collaboration.

There is a joint understanding that collaboration between actors is a precondition for effective crisis preparedness. Nonetheless, it was also highlighted that collaboration in crisis preparedness comes with some challenges and that some factors are more important compared to others. These will be further presented and analyzed below.

6.2 Challenges for effective collaborative crisis preparedness

Since the findings in the previous section captured great evidence that NPG is taking place in Swedish crisis preparedness, this and the next section (6.3) will analyze and present findings related to the second research question: *What are the factors that could foster effective collaborative crisis preparedness?*

Findings from the questions under the headlines *The role and work of the actor, MSB and Crisis preparedness* and *Challenges in Swedish crisis preparedness* is included in this section. To answer the research question, this section will first present findings connected to the challenges presented in the analytical framework, regarding accountability and division of responsibilities. The next section will present and analyze findings connected to challenges captured in previous research.

6.2.1 Accountability and division of responsibilities

The core principles of crisis preparedness, *the principle of responsibility, the principle of proximity* and *the principle of similarity*, are very reasonable and create a good foundation for crisis preparedness in Sweden (Interviewee 1, Interviewee 3, Interviewee 4,). However, *interviewee 4* points out that there will always be these questions on how these principles are applied in reality and the problem with actors that interpret them differently, and there are some great challenges around this. We have seen this in many crises before and it has become quite clear that there will always be situations or problems in a crisis for which no one has designated

responsibility. When this occurs, it does not say in anyone's instructions that "this situation is your responsibility", and then it becomes no one's responsibility (Interviewee 4). A similar problem is demonstrated by *interviewee 6*, which describes that:

"The principle of responsibility is the biggest concern, or the most obvious inconvenience. It is a good idea and a good basic principle, but we can see that when an authority has the responsibility for a crisis, or should take the responsibility in a matter, but does not agree with that, the whole system is being paralyzed. It stays there as MSB does not have the mandate to give out assignments. This is a great downside of Swedish crisis management since you can be completely paralyzed because of this, which we have seen before" (Interviewee 6).

This challenge is also noted by several scholars at the Swedish Defence University (Försvarshögskolan, 2021; Sveriges Radio, 2021) which explain that the principles in Swedish crisis preparedness are insufficient since they create gaps and deteriorate crisis management due to an unclear division of responsibilities. The proposal to solve this is that the role of governmental agencies must be clarified that agencies must take on a greater role in a suitable setting and work as a facilitator to induce joint responsibility (Försvarshögskolan, 2021; Howlett et al, 2017). According to MSB's instructions, when these gaps occur, it is MSBs responsibility to solve these problems and in that way also take a greater role in crisis preparedness. This means that MSB should have a responsibility where no one else is responsible, which according to *Interviewee 1* is very vague. It feels like the instruction is not fully developed, but the Government has inserted it and MSB has managed it based on what we can handle.

Moreover, a respondent describes that when MSB is trying to be involved and take more responsibility for situations in which the division is unclear, it is incredibly difficult to do so since MSB has their perspective on which actors that should have the responsibility as well. The respondent explains that there have been situations when this has occurred, when MSB is trying to solve a problem and saying that "this is your responsibility", but MSB has got the answer back that it is not the case since it does not say so in their instructions. Our [MSBs] experience is that the principle of responsibility is sometimes most considered and used to say what you are *not* responsible for, which suddenly in a crisis can do several things and this challenge is very clear (Interviewee 4).

Furthermore, there is a joint agreement that there are occasions of uncertainties or confusion regarding the actor's role in crisis preparedness and all of the interviewees have experiences with this. However, explanations for such events differ. One finding is that during the tsunami disaster in 2004 and in conjunction with the wildfires in 2014, some actors did not know what to do or which responsibilities they had. But it does not mean that the core principles of crisis preparedness are insufficient, instead *Interviewee 3* explains that it could be because of actors have not practiced or trained for such major events or that they don't understand the principles clearly. Swedish society has not faced many crises which requires the interaction of more actors. *Interviewee 3* thinks it is more that we have to lubricate the crisis preparedness system since no one has enough information if it's just written on paper and actors do not really think about how it should work in reality without practice. Moreover, another respondent explained that both the migration situation and the covid-19 pandemic have captured uncertainties vis-à-vis accountability. Actors, private and governmental, were fighting over the same resources and bidding over each other to pursue emergency preparedness measures during the migration situation. During the pandemic, there have been discussions regarding the procurement of safety equipment; Whose responsibility is it to procure safety equipment? Is everyone allowed to do this? To what extent can you keep stock? Can everyone keep stock or who is responsible? Questions like this do absolutely create uncertainties in crisis preparedness (*Interviewee 5*).

Interviewee 2 explained that the legislation and the principles for crisis preparedness are not sufficient and that there is not enough room for proactivity in Swedish society. We [Sweden] are not good at dealing with complex risk dynamics and covariation factors, as well as wicked problems. Swedish legislation and our society cannot, or are very bad at, solving complex problems and that is exactly what we are facing. There is a lack of a holistic approach and actors do not look at a macro level and how everything is connected, but everyone tries to interpret their own mission instead, and that leads to some difficulties. Wicked problems are, according to Nohrstedt (2018), complex problems such as hazards and crises that have a variety of candidate solutions. A solution to such complex problems is argued to be a collected capacity from not only one single public actor, but requires collaboration between different levels of government, public organizations, non-state actors, private companies, and across sectors (Alford and Head, 2017; Cristofoli et al., 2017).

Christensen and Laegreid (2012) discussed that accountability will be reduced and unclear if a society is inspired by the thinking of NPG. Both public and private actors will now have the responsibility to be accountable upwards, horizontally, vertically, and downwards and face different kinds of accountabilities of which they have less knowledge. This challenge was something that interviewees indicated:

“There will always be gaps where someone must take responsibility, and I will say that those gaps will always be there. The experience of collaboration is very high in everyday life, but in crises there will always be sole actors who may not have been involved in everyday life collaboration and who may end up in an incredibly stressful situation in this crisis. It is always a challenge to collaborate with those actors”
(Interviewee 5)

“We have risk development in different parts of the country, the municipalities can choose to do different things because they have different conditions and in the sense of what risks they are at. And then we have the regional levels, the state levels, and who will pay then? And then there is the private sector, it will be a tug-of-war that will affect the room for maneuver for crisis preparedness. I guarantee you, as the situation escalates, there will be an increased focus on who shall be responsible for the costs. Actors will start arguing about it and shift the responsibility away” (Interviewee 2).

It is argued that co-production increases public accountability for expected outcomes, and this would in turn result in governments will no longer take full responsibility for any policy failure and could instead shift blame for failure onto others (Poocharoen and Ting, 2015, p. 590), which Interviewee 2 raises concerns about. If Sweden would have legislation, and also an interpretation of it that was up to date with the development of risks in our society, then we would not see the risks that we are seeing and be handcuffed to solve these situations. It happens all the time that people are confused, and that’s why evaluations and guidelines are made all the time. This is proof that we do not know how to interpret the legislation. Climate change will affect everything when it comes to crisis preparedness, and this must become normative, but there is a risk that we will not see any great changes until there are really difficult situations (Interviewee 2).

Another perspective was presented by *Interviewee 3*, who brought up the suggestion from MSB in 2016 concerning the new principles in crisis preparedness. The respondent's personal opinion is that the principles are good enough, but that people have discussed and talked about a development of the principles a lot. The respondent explains that the aim of the principle of responsibility is that whoever has the responsibility in a peaceful time also has a responsibility to take over in a crisis, and this is very clear. If this is not followed, everyone has to wait for each other. But according to this principle, everyone could figure out who will have the accountability for something, and it is very important that actors in crisis preparedness have a clarity of divisions of responsibilities. This also results in governmental actors daring to distribute responsibilities as well (Interviewee 3).

While focusing on the challenges with accountability and division of responsibilities that were presented in the analytical framework, interviewees explain that Swedish crisis preparedness is affected by the unclear division of responsibilities based on *the principle of accountability*, the lack of a holistic approach by actors within crisis preparedness, MSB's role as a coordinator when gaps are being created in the crisis preparedness system and that actors may shift responsibility away. The next section will present findings on what factors that could foster effective collaborative crisis preparedness while focusing on challenges presented in previous literature.

6.2.2 Challenges presented in previous research

Findings from previous research, interviews with local and regional crisis preparedness planners, expressed that communication is an essential part of crisis preparedness implementation. Through communication, collaboration in crisis preparedness could be facilitated and more effective since the needs of actors within the working area will be emphasized and there could be a realization of different working cultures, needs and if language is used differently (Borell et.al, 2018). Collaboration in crisis preparedness will never work perfectly and if we look back at accidents and crises, there will always be something that has failed and that needs more attention. What we can see is that it is often communication that lacks in these situations. All sectors are needed, and more people need to be joining in for crisis preparedness, but the system needs to be lubricated and practiced. Otherwise, the alternative is to let a crisis happen and not communicate about the situation beforehand, and we [MSB] would be ashamed of that (Interviewee 3).

Collaborative crisis preparedness is dependent on the relationship between the actors involved and their interests. Studies show that if there has been communication and cooperation between actors in the planning of crisis preparedness, these will also collaborate more effectively when crises occur (Danielsson and Eliasson, 2010). *Interviewee 4* explains that since Swedish society is very connected and dependent on each other, it is clear that actors on all levels need to work together for effective crisis preparedness. The respondent continued with that MSB, as a central actor and a governmental authority, has some challenges getting help and communicating with the rest of the society and including them in the crisis preparedness work. This challenge is very important and evidence of this emerged especially during the pandemic when MSB worked against industry organizations in the help with spreading information. The organizations were very happy to be included, to know how they could contribute and to get knowledge of what is expected from them (Interviewee 4). Moreover, it is also a challenge to communicate to actors who are expected to help in crisis preparedness but have no obligation to do so. *Interviewee 1* explains:

“It is very difficult to communicate. We [MSB] are coordinating actors to ensure that the right one takes responsibility, since if no one thinks they have the responsibility, it is our work to ensure that it is coordinated to the right actor. We have the preparedness but, in some situations, it is still based on volunteering, and it can be difficult. It works for the most part but, it is a risk, and it is very difficult to communicate that assignment”
(Interviewee 1).

Co-production is one of the core thinking of NPG and its effectiveness is argued to be dependent on how able the top-down governance frames united action between different types of actors in ways that balance flexibility and accountability (Peters, 2010; Sorensen, 2012). *Interviewee 3* explained that previous crises have shown the importance of communication, having coordinated messages and the essential part of actually talking to each other beforehand. The respondent does further stress the importance of communication between the ministries, which is a challenge and could be better. This was already a problem during the tsunami catastrophe in 2004 and not much development has happened since then (Interviewee 3). *Interviewee 1* describes that it is important for an authority such as MSB to communicate and build relations as a preparation for crises, in this way actors can understand each other and have a united understanding of what is expected from them. Having social ties with actors is a great advantage

and this is why MSB has collaboration conferences, to bring together a great number of participants. However, it is identified that private actors such as business and trade are needed in crisis preparedness, but there is no communication forum at the central level for these actors since they are not involved in the collaboration conferences (Interviewee 1).

Some of the findings above have already mentioned coordination and MSB's role as a coordinating actor. Boin and Bynander (2016) argue that coordination has been identified as a critical failure factor in great disasters and crises, and Howlett et al (2017, p 492) explain that to be successful in encouraging citizens to engage in cooperative forms, there must be a suitable setting where the government works as a facilitator and induces joint responsibility. According to the instructions from the government, MSB has a major role to coordinate actors before, during and after a crisis. In this way, MSB can present an overall picture of the need for preparedness and which shortcomings there are. It is not MSB that actually carries out the work, but instead has the role to coordinate the right actors and make sure that capacity and skills are used in the right ways (Interviewee 3). In addition, *Interviewee 6* explained that MSB's role in crisis preparedness is short on paper and that they can interpret the assignment itself, which is a process that is constantly evolving. However, since MSB is a central authority, it is not in their instructions to communicate directly to other actors than governmental ones since it would not be feasible. Another respondent explains that the work to be able to facilitate actors, most of the time other authorities, within crisis preparedness is something that has been done for a long time. Yet it has been difficult for MSB to find the role and work for a whole society approach since through a spinal reflex MSB, is a little uncomfortable to coordinate with actors such as trade and businesses and private individuals, who actually are the large number of actors who drive the whole development within crisis preparedness. It is essential for Swedish crisis management that there is an actor such as MSB that has this role since the need for coordination is very high in crisis preparedness (Interviewee 2).

Furthermore, as coordination has been identified as a critical failure factor in great disasters and crises (Boin and Bynander, 2016), *Interviewee 1* raises the challenge of coordination among volunteers and individuals, which are important actors in the thinking of NPG and its co-production. The respondent explains that there have been situations in which coordination between these actors has failed since they don't know how to provide the right support at the right time, which could even deteriorate crisis management. The challenge is that there is no

clear actor who is responsible for the coordination of these actors. Municipalities are trying to take care of spontaneous volunteers, but there is no routine for that, and Swedish society has too little experience with it. At meetings have *Interviewee 1* experienced that other authorities want MSB to take this coordination role, but MSB cannot coordinate the entire crisis preparedness (*Interviewee 1*). The challenge with coordination is also brought up by *Interviewee 4*, which explains that there have been situations when governmental authorities do not agree with each other and that MSB has been allowed to mediate between them. But it is also very, very hard to know where the limit to intervene is drawn. Some people are saying that MSB should only intervene when needed, which the respondents agree with, but since we are living in such a complex society there will also be several actors and not only authorities who are connected to every small problem that arises within Swedish crisis preparedness. This results in that there may be one or two actors who think that MSB should intervene and coordinate, but others do not agree and don't see how MSB can help. The challenge here is to acknowledge when the need for coordination arises, which is not easy (*Interviewee 4*).

“MSB cannot solve all the problems out there because then we would drown, but it is also important to choose which problems we should go into” (*Interviewee 4*).

6.3 Factors for effective collaborative crisis preparedness: natural disasters

Findings from the questions under the headlines *Climate change and natural disasters* and *Collaboration* are included in this section. Some of the respondents brought up the perspective of a whole society approach, or common understanding, as an important factor for effective crisis preparedness. *Interviewee 2* said that there is a lack of a holistic approach and thinking and since crisis preparedness is divided into several sectoral responsibilities, actors draw reductionist conclusions from a small position. The challenge is that one does not look from a macro-level and how everything is connected, but everyone tries to interpret their own mission, and that leads to some difficulties. If MSB does not go into these domains and work together with these actors, regardless of whether they are authorities or private, then we will not succeed with the whole society approach. It is not meant for MSB to do everything within crisis preparedness, but we [MSB] must interpret our mission in relation to this and support other actors to achieve a holistic system perspective. The respondent explains that:

“There will always be challenges with collaboration, and I think we have a lot to learn from each other to be able to solve these complex problems and to do that, then we must have a broader perspective. Both between different sectors but also between different levels. We must have both a top-down and bottom-up perspective in mind. Everyone must join and a united force is required” (Interviewee 2).

In the previous section, *Interviewee 5* explained that there has been a broad project within MSB since the end of last year where people work to update the version of *”Gemensamma grunder för samverkan och ledning vid samhällsstörningar”* (2014). Two of the highlighted approaches towards effective collaboration in the report are ‘holistic view’ and ‘systems perspective’. Both of these approaches that are brought up in the report, which were mentioned by *Interviewee 5*, were also mentioned by *Interviewee 2* as important factors for effective collaborative crisis preparedness.

Furthermore, *Interviewee 4* explained that overall, there is a good collaboration between actors in crisis preparedness, but there will always be situations where it is not easy to collaborate. Most of the actors within crisis preparedness have a good will, want to do good things together and see it as a strength to be able to collaborate in a good way. However, there is this case when different actors make different interpretations of the legislation and have various levels of ambition for several reasons. Actors do also have an uneven number of resources that have been set aside for crisis preparedness for natural disasters and different actors may also have slightly different ease of seeing things from the perspective of others, which is essential in order to collaborate effectively. What has been very clear in crisis management is the need for a prospective understanding, which is high on the respondents’ wish list, and to be able to help and understand a situation or event from different perspectives. This is something that actors are different good at depending on how often actors work together and which understandings there are for others (*Interviewee 4*).

Another factor for effective collaborative crisis preparedness is training and exercises, which is brought up by *Interviewee 3*. It was noticeable that during the tsunami catastrophe in 2004 and during the wildfires in Västmanland 2014, actors involved in crisis preparedness did not know that they were supposed to do anything or what was requested from them. However, this was not because of unclarity in the Swedish legislation or because of the principles. This was because actors had not had any preparedness practiced or trained together for such events. When

something big happens in our society, such as the wildfires in 2014 and 2018, it requires more actors that work together, and these actors need to have exercises together. Research and reports do point out that there will be greater consequences and more extreme weather situations which will lead to natural disasters in Sweden. This was already clear in a climate and vulnerability investigation in 2007, but not many people read it or paid attention to it then. Sweden needs to take more preventive measures so that such serious consequences do not occur since natural disasters are affecting crisis preparedness and needs to do that as well (Interviewee 3).

On the contrary, *Interviewee 6* thinks that previous exercises are important, but also overrated. Instead, the respondent agrees with Boin and Bynander (2016) and Howlett et al (2017, p 492) that coordination is a critical factor in crisis preparedness and important for effective collaborative crisis preparedness. It is very critical that the crisis management can be paralyzed because actors have different opinions regarding responsibilities. Someone needs to have the mandate to quickly say “this is how we should do it” however, the respondent doesn't know exactly how this should be designed since it is difficult to make everyone satisfied. *Interviewee 6* do also point out that *the principle of responsibility* should be supplemented. But, since a report by the Government commission of inquiry (SOU: 2021:25, *Struktur för ökad motståndskraft*) did not suggest any changes to the principle, the respondent is disappointed and believes that there will not be any changes regarding the principle in the upcoming years. A similar criticism was presented by Scholars from the Swedish Defence University in chapter 3, which left comments to the SOU and suggested a new, hierarchical structure for crisis preparedness where the role of governmental agencies must be clarified and that these actors must take on a greater role in the crisis preparedness (Försvarshögskolan, 2021).

Findings in this section capture that factors for an effective crisis preparedness are the presence of a whole society approach, or common understanding, and communication to achieve a holistic system perspective. Another factor is the importance of a common interpretation of Swedish legislation and the core principles in crisis preparedness. In addition, a respondent brought up the importance of training and exercises for effective collaborative crisis preparedness, whilst another respondent thought that this was overrated and instead emphasized the importance of coordination in crisis management. The next chapter will discuss findings that have been presented throughout *chapter 6*.

7. Discussion

The findings presented in the previous chapter support the notion that NPG is taking place in Swedish crisis preparedness. There is a general agreement among the interviewees that to achieve an effective crisis preparedness, collaboration between different actors on all levels is required. Findings do also show that the idea of co-production, which is included in the analytical schema and in *Figure 1*, is a key procedural management tool in crisis preparedness. MSB is actively using the concept ‘co-production’ as, for example, in the description of the updated project *Gemensamma grunder för samverkan och ledning vid samhällsstörningar* at their website and describes this “*as collaboration and interaction between different actors and political levels*”. The definition and use of the concept is similar between MSB and NPG.

Furthermore, interviewers revealed that critical infrastructure and territories that the whole society are dependent upon are often privately owned. Therefore, all actors are highly interrelated and this needs to be accounted for in Swedish crisis preparedness. This finding is congruent with the collaborative style that NPG is characterized by, which is “*the process of facilitating and operating in multi-organizational arrangements to solve problems that cannot be solved or solved easily by single organizations*” (Agranoff and McGuire, 2003, p. 4). These findings conclude that NPG is taking place in Swedish crisis preparedness since MSB is using the same concepts and advocates for the same ideas as NPG to achieve effective collaborative crisis preparedness.

However, despite a general agreement that effective crisis preparedness require collaboration of many societal actors and that the accountability is multifaceted, it is not clear who have the responsibility to include these actors in crisis preparedness work. As a central governmental authority, MSB have a collaborative role before, during and after a crisis to present an overall picture of the need for preparedness and which shortcomings there are. Despite that the data in this paper confirmed that non-governmental actors are needed in crisis preparedness, MSB is a little bit “uncomfortable” and not used to coordinate with these actors and it is mostly governmental authorities that are included in the collaboration conferences held by MSB. It is also unclear, according to some of the respondents, if the role of MSB currently is to coordinate all these actors since MSB actively interpret its overarching role and individual assignments in the process of crisis preparedness, which is a process that is constantly evolving. According to NPG, the role of the government is to facilitate collaborative styles and the goal is to achieve a

more legitimate, inclusive, flexible, and effective government. Although, as MSB is heavily affected by the thinking of NPG, which the collected data showed, it is less clear to what extent this is translated in practice and if MSB is preparing for an increased, facilitating role to get all relevant actors included in crisis preparedness. The interviewees are confident that having an actor with a strong, coordination mandate is a factor that could foster effective collaborative crisis preparedness.

The current principle of responsibility, that determines who responds to crises and when, creates a great deal of uncertainty to MSB's coordinating role. According to most interviewees, the principle of responsibility is unclear and can deteriorate crisis preparedness. There were situations when governmental authorities did not agree with each other and MSB was allowed to mediate between them. However, it is very hard for MSB to perform this function efficiently, as the limits of such interventions are not drawn. This creates a challenge that is brought up both by primary and secondary data, which is that the crisis management is being paralyzed since MSB does not have a mandate to give out assignments, and that the principle of responsibility is insufficient since it creates gaps and could deteriorate crisis management due to an unclear division of responsibilities. The data shows that typically there is one or two actors who think that MSB should intervene and coordinate, but others do not agree and don't see how MSB can help. Accountability and an unclear division of responsibilities have been pointed out as challenges to implementation of NPG in practice by previous research, and these challenges are also notable by the interviewees.

In addition to, findings capture that other factors that could foster effective crisis preparedness, and be a solution to the challenge described above, are a whole society approach and communication. The former was both brought up by secondary data, in a document by MSB, and from interviewees and the latter was highlighted in previous research and by interviewees as an important factor. Since actors make different interpretations of legislation, the core principles, and their own assignments, it is important to have other perspectives in mind as well. Especially when it comes to crisis preparedness for natural disasters since its consequences are stretching cross-border which will require solutions that also are cross-border. According to the findings do communication create a better starting point for collaborative crisis preparedness since social ties foster effectiveness. Communication could also be connected to the factor of earlier exercises or training between actors, which according to previous research (Danielsson

and Eliasson, 2010) and one of the respondents are increasing the effectiveness. Communication between actors and from a central authority as MSB could also lead to a more inclusive and flexible government, which is the main goal of NPG since more actors could then be included in crisis preparedness planning and MSB could develop increased communication with non-governmental actors.

8. Conclusion

This study aims to contribute with knowledge about the collaborative style and co-production that is included in the thinking of NPG, and also to the field of research within collaborative crisis preparedness with a focus on Sweden. To examine if NPG taking place in Swedish crisis preparedness and what factors that could foster effective collaborative crisis preparedness, data was collected through interviews with MSB's employees, a central authority in Sweden. The research gap, how governmental agencies work to effectively manage challenges through non-hierarchical collaborative processes and what factors that could foster the performance for effective collaboration are filled. This paper does also contribute to the request for additional information from a higher organizational level and more top-down perspectives in the planning for crisis preparedness.

The conclusion is that NPG is taking place in Swedish crisis preparedness since findings from secondary data and interviews capture that MSB is using same concepts and advocates for the same ideas in crisis preparedness, as NPG does. One example is that MSB documents promulgate the use of the concept 'co-production', which is the dominant substantive policy tool in NPG. The DG of MSB do also advocates for increased involvement of trade and industry in crisis preparedness planning which results in multifaceted accountability and public participation in as a key management tool. Moreover, organizations, businesses and governmental authorities should collaborate and share experiences for effective crisis preparedness (Gornitzka, 2022), which characteristics is of collaborative styles.

According to previous literature the thinking of NPG creates uncertainty in the division of responsibilities and blurs accountability as actors are able to shift blame for failure onto each other. Previous evaluations and findings of this thesis support this and explain that there are gaps in the crisis preparedness system where MSB is trying to take more responsibility, particularly in terms of coordination, but that this comes with several challenges. One factor that could be a solution to the challenge described above and foster effective collaborative crisis preparedness is coordination, which is highlighted from both previous research and from interview data. It is essential for Swedish crisis management that there is an actor that has this role since the need for coordination is very high in crisis preparedness. Findings from the interviews does also show that the presence of a whole society approach and communication is needed for effective collaboration. An authority such as MSB needs to communicate and build

relations with a large number of actors as a preparation for a crisis, so actors can understand each other and have a shared understanding of what is expected from them. This is even more important when it comes to crisis preparedness for natural disasters since its consequences are cross-border in nature, and this will require solutions that are inspired by a common understanding and a holistic system perspective.

Lastly, the result of this study can support actors within the crisis management system by generating a better understanding of the nature of challenges within the field of collaborative crisis preparedness and what factors foster effective collaborative crisis preparedness. However, this research is built on a material with one, albeit very important, crisis management actor. To gather a fuller picture of the extent to which NPG thinking penetrated the field of crisis preparedness in Sweden, the perspective of all actors involved is needed. The suggestion for future research is to look deeper into other actors within Swedish crisis preparedness and contribute more to the field of effective collaborative crisis preparedness. This is even more urgent in a time when natural disasters are projected to increase and thus, collaborative crisis preparedness will play a crucial role in civil protection.

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Appendix 1

Interview guide

The role and work of the actor

What is your role at MSB?

How come that you work at your specific department?

In what way is your work interconnected to crisis preparedness?

What goals do MSB work towards connected to crisis preparedness? What are the most important goals for your agency? (Internal goals, national goals, global goals)

What strategies have been adopted to achieve these goals?

MSB and Crisis preparedness

What is MSBs responsibility in crisis preparedness?

Has MSBs responsibility in crisis preparedness changed over the last years? *If yes, how? If no, how come?*

Challenges in Swedish crisis preparedness

Do you think that the legal framework for crisis preparedness is sufficient? What is good, what is bad?

Do you feel that there are gaps in which the legal framework does not cover?

In your work, have there been any occasions where there have been uncertainties/confusions regarding actor's role in crisis preparedness?

Climate change and natural disasters

In what ways does climate change impact preparedness efforts?

What can we learn from previously natural disasters in regards of crisis preparedness?

Do you think SE is prepared for natural disasters? Specific examples?

Compared to other countries, how is SE working?

Collaboration

According to you, how does collaboration look like between actors in crisis preparedness?

MSB has asked for further collaboration in crisis preparedness, do you think we need to increase collaboration in crisis preparedness?

What challenges/opportunities do you see in terms of cooperation and priorities?

How does your agency work for further collaboration in crisis preparedness?

Anything else you want to add?

Thank you for your participation!