Changes in Norway's societal safety and security measures following the 2011 Oslo terror attacks

Abstract

This paper characterizes changes in Norway's civil protection and emergency preparedness five years after the Oslo and Utøya terror attacks. Data from 48 interviews conducted in the period 2014 to 2016 with civil servants within different levels of the justice sector were qualitatively analyzed. The inductive analysis shows four main changes made related to Norway's civil protection and emergency preparedness within the Ministry of Justice and Public Security: 1) a change in risk perception regarding awareness of security-related risks; 2) the generation of several plans and measures; 3) structural changes at various levels within the justice sector; and 4) increased resources allocated to societal safety and security. The changes following the Oslo terror attacks were not solely in response to the terror attacks, but also the result of previous and subsequent events and reports. The current organization of public administration, however, still fosters siloed thinking and turf wars around the principle of responsibility and each sector's respective area of expertise. Most of the implemented changes can be characterized as structural; diagnoses made after the terror attacks pointed at cultural aspects.

1 Introduction

In the post-war era, Norway has been fortunate in facing only a handful of large-scale crises and terror-related events (Rykkja, Lægreid et al. 2011). As a result, a fairly untroubled society has been able to attend primarily to the welfare of its inhabitants (Kuhnle 2000, Wollebæk et al. 2012). On July 22, 2011, the nation was shocked when an armed right-wing extremist single-handedly bombed the Government Complex in Oslo and thereafter shot young political aspirants attending a youth camp on the island of Utøya. In total, 77 people were killed during these terror attacks.

The aftermath of disasters and national crises represent an opportune time to examine governmental strategies for civil protection and emergency preparedness (Birkmann, Buckle et al. 2010). They provide a moment for self-reflection and a chance to learn from previous mistakes and weaknesses in the governmental system. Changes are usually implemented to demonstrate handling capacity or rectify specific gaps in the system (March and Olson 1983). Lessons learned are ideally applied to a broad context, where the knowledge gained is used to address not only the specific problem but also other issues that may arise from these inadequacies.

Nevertheless, in these situations, society also often shows an inclination toward morality plays and blame games (Boin, Hart et al. 2006). A focusing event, such as a terror attack, often leads to excessive fixation on solving the specific problem brought to light by the event (Birkland 2006). Leaders feel pressured to take charge and prevent a similar crisis, and they risk overreacting by way of regulation or other actions and measures in response to the event (de Ridder and Reinders 2014, van Tol 2016). This spontaneous reaction is in part due to media coverage or "mediazation" (Helsloot, Boin et al. 2012), political interests, misconceptions, and an overestimation of risks (de Ridder and Reinders 2014). Unfortunately, increasing focus on an event does not guarantee that learning will occur (Birkland 2006).

Competition in politics influence how resources are distributed, even in affluent countries like Norway (Ölcer 2010). Political mechanisms operate and create opportunities for some interest groups to benefit more than others (Ibid). The ability to determine the allocation of resources reflects power of individuals and groups (Lukes 1974, in Antonsen 2009). When large-scale crises transpire, the government faces pressure to act and appease the public in order to restore citizens' confidence in the country's leaders. The political pressure coming from the media and the general

public is, however, fleeting. This causes an intense political focus to shift from one issue to another, or a loss of momentum during change processes (Bodensteiner 1995, Walgrave and Aelst 2006).

Organizational structures also affect the resources available for civil protection and emergency preparedness. By way of example, a rush and backlash of organizational changes related to the imbalanced focus on terrorism followed 9/11 in the US where the Federal Emergency Management Agency (FEMA) was placed under the Department of Homeland Security, resulting in the weakening of FEMA's emergency network, political influence, critical staff members, key functions, and resources (Moynihan 2009). The disproportional focus on national security resulted in the poor response to Hurricane Katrina in New Orleans (Ibid).

In brief, the changes that occur in public organizations following a crisis are not straightforward, as these organizations are part of a "complex political and social network of organized interests, citizens, user groups, and clients" (Christensen et al. 2007). Many factors influence and oppose each other, producing varied results regarding legal frameworks, negotiations, conflicting goals, finite resources, external pressures, and culture.

It is not surprising then that in an age dominated by highly complex and tightly coupled sociotechnical systems (Perrow 1984, Rasmussen 1997), research on policy changes following crises and mega-crises has attracted a great deal of interest (Helsloot, Boin et al. 2012, t'Hart 2013). The first point is so obvious it might be missed by way of its central importance; previous research makes it quite clear that governmental policy *changes* after large-scale events, such as Hurricane Katrina (Olshansky 2006, Birkland and Lawrence 2009, Boin, t'Hart et al. 2009, Moynihan 2009), Fukushima (Wittneben 2012, Samuels 2013), Hurricane Andrew (Twigg 2012), the 9/11 terror attacks (Birkland 2006, Boin, 't Hart et al. 2009), and the Columbine shootings (Birkland and Lawrence 2009). The research for this paper explores whether the Oslo terror attacks brought about drastic changes in Norway's societal safety and security. The paper seeks to answer two main questions. First, what changes to Norway's societal safety and security measures were implemented in the aftermath of the 2011 Oslo terror attacks? Second, what factors explain the developments in Norway's emergency preparedness?

The study has been undertaken as part of the research project NEXUS (The Next Disaster – cooperation and action capacity in Norway after the 22nd of July terror attacks). Other papers produced in the project address the issue of organizational learning following the incident [see Aalberg et al. (in review), Almklov et al. (in review) for an analysis of learning points following July 22]. As the effects of change, and especially changes in culture, take time before they can be observed, this paper does not evaluate the effects of wider secular trends. Rather, we aim to explore some changes, e.g. the structural reorganization within the Ministry of Justice and Public Security (MJ) and describe the various factors that have influenced the developments in societal safety and security, both from a specific instrumental perspective and a wider institutional perspective.

Section 2 provides context for how the concept and organization of societal safety in Norway is understood within this research. Section 3 describes the research methodology, and Section 4 presents our main findings. In Section 5, we discuss our findings through instrumental and institutional perspectives. The paper concludes by discussing the country's challenges in the area of emergency preparedness in the context of today's increasingly complex society.

2 Societal safety in Norway after 2011

In Norway, societal safety refers to protection against a variety of threats, including factors that are normally associated with security. The concept has been defined differently in various public documents. Here, we apply Olsen et al.'s. (2007) definition of social safety as "society's ability to

maintain critical social functions, protect the life and health of citizens, and meet citizens' basic requirements in a variety of stressful situations." This definition encompasses the ability to provide a sufficient level of security. The concept of security is here defined as the reduction in probability along with the mitigation of consequences regarding deliberate acts (e.g., terror attacks). The official Norwegian report, *A Vulnerable Society* (NOU 2000), draws attention to the government's understanding of society's demands and core values: life, health, welfare, democracy, sovereignty, territorial integrity, material and economic security, and culture. Social safety in Norway is in these ways a broad term that encompasses several sectors in society.

The Ministry of Justice is overall responsible for societal safety and security, crime prevention, immigration and integration, courts, legislative work, correctional services, and the polar regions of Norway. Societal safety in each public sector (e.g., transport and health), however, is also the responsibility of the ministry heading the specific sector. For instance, the Ministry of Petroleum and Energy is responsible for ensuring a reliable power supply to households, industries, and public services. To cope with the cross-sectoral efforts in societal safety, four overarching principles have been established in the area of civil protection and emergency preparedness. The principle of responsibility states that the unit responsible for normal operations in a certain sector is also responsible for its emergency preparedness during extraordinary events. The principle of similarity denotes that operations during crises should be, as much as possible, similar to the organization's daily operations. The third principle is proximity, which underlines that all crises should be handled at the nearest possible organizational level, e.g. by the local police department. The principle of cooperation was introduced shortly after the July 22 terror attacks, emphasizing that each organization and agency has a direct obligation to ensure cooperation with relevant agencies in their work toward prevention, preparedness, and crisis management.

In the wake of the tragedy, the July 22nd Commission, more commonly referred to as the Gjørv Commission, was entrusted with the mission of investigating what went wrong, what lessons could be learned, and how the country could prevent such an atrocious event from happening again. In August 2012, after one year of investigation, the Commission published the Gjørv Report (NOU 2012:14). The Commission concluded that attitudes, culture, leadership, exercise of authority, and better connection between words and actions were critical to the turnout of events.

The Commission identified five major findings and presented 31 recommendations. Although the Gjørv Report did not define culture, the report points to attitudes and culture related to risk recognition, implementation of actions, cooperation, ICT utilization, and result oriented leadership, i.e.:

- (1) The ability to acknowledge risk and learn from exercises was not sufficient.
- (2) The ability to implement decisions that have been made and use the plans that have been developed was ineffective.
- (3) The ability to coordinate and work together was deficient.
- (4) The potential inherent in information and communications technology [ICT] was not exploited well enough.
- (5) Leadership's willingness and ability to clarify responsibilities, set goals, and adopt measures to achieve results was insufficient. (22 July Commission 2012)

In summary, July 22 revealed serious shortfalls in society's emergency preparedness and its ability to avert and protect itself from threats (NOU 14: 2012).

Subsequently, the Ministry of Justice and Public Security published a list of measures and actions it has taken in response to the Gjørv Report (MJ 2016). The highlighted changes include budget increases, equipment purchases, emergency exercises, training and certification programs, a new

department within the Police Directorate (POD) responsible for crisis handling and preparedness, a research center focusing on extremism, digital communications, plan revisions, increased staffing, and military-police cooperation plans. Table 1 presents an overview of the measures implemented. The numbers in parentheses under each category refer to our assessment of how well each measure addresses the Gjørv Commission's conclusions.

Table 1 Overview of the measures implemented by the Ministry of Justice and Public Security following July 22 (simplified from MJ 2016)

Culture, attitude, and leadership (1,5)	* Clarification of roles and responsibilities * Establishment of crisis handling and preparedness department within NPD * Establishment of unit addressing crisis and emergency preparedness (MJ, PSS, and SAR) * Leadership duty awareness through annual exercises	* MJ, NPD, and police district staff training * Training related to ongoing life-threatening violence * Police exercises adapted to current situations
Prevention (1,2)	* Action plan on radicalization and extremism * Police district contacts for anti-radicalization work * A 60% increase in PSS budget for staffing, ICT, and security guard services	Establishment of the Center for Research on Extremism PSS local units with analytical competence Police reform aimed toward all types of crime
Crisis management (1,2,3,4,5)	* New procedure life-threatening violence * Updated plans for civilian and military crises * Round-the-clock civil situation centers (NPD, MJ)	* Police districts with training courses for staff * Crisis management tool (CIM) for information and mobilization
Communication (4)	* Nødnett in PDs (emergency services coordination) * Communication platform for sensitive information * Emergency preparedness prioritized in ICT network	* Public access to government audit reports * SMS 110, 112, 113 to aid deaf and hearing impaired
Cooperation between actors in emergency preparedness (3,4)	* Police Act stating that armed forces have the duty to assist the police * Maritime and military special forces support to assist police in anti-terror operations * Security guard services to assist police in securing national objects * Reduction in military helicopter response to police down to one hour * Military and police counter-terror exercises * 18 million NOK for equipment granted by civil defense	* Joint counterterrorist center * 2015 plan for rescue services clarifies organization and responsibilities * MJ and FD working on military assistance for public authorities * Police use of sea pilot helicopters stationed in Bergen and Hammerfest * Increase in police helicopters by 2020
Staffing (1,2,4)	* Minimum staffing, operation centers (2–3 depending on center size) * 1,000 new police positions * NPD introduction of police response time requirement	* Additional training hours dedicated to IP4 police response * 300 additional personnel skilled in high-risk situations * Additional police officers and police equipment
Methods (1,2,5)	* Amendments to Criminal Procedure Act related to the prevention and investigation by police in digital spaces * Police patrols certified for use of service weapons * Weapons stored in police cars, boats, and helicopters * New weapons instruction: permit to carry weapons is decided by police district operations leader	* Change in method of oversight of sectorial work in emergency preparedness * Deviations not closed until situation is rectified * From May 2016, special forces (Delta) can use police helicopters as firing platforms * Police district with armored vehicles

In addition to the Gjørv Commission, other agencies undertook their own evaluations of the events. Among these are the Norwegian Directorate for Civil Protection (DCP 2012), the Police Directorate (POD 2012), the Norwegian Police Security Service (PST 2012), the municipalities where the two attacks occurred (Oslo kommune 2011; Hole kommune 2012), the Ministry of Justice (MJ 2012), the Norwegian Board of Health Supervision (Helsetilsynet 2014), and the Office of the Auditor General (Riksrevisjonen 2015). Beside from highlighting deficiencies, each of these reports also provided their independent recommendations.

3 Methods

The methods used in this qualitative study were inspired by grounded theory (Glaser and Strauss 1967). The interview data were analyzed as soon as it was collected in order to capture important themes (Corbin and, Strauss 1990). An iterative process was used, meaning that the initial findings to

include relevant questions or focus on emerging themes in the second-round interviews (Lingard et al. 2008). The frequency of different themes brought up in the interviews helped determine their relevance. The iterative process of interviewing and analyzing was performed until the level of saturation was reached. This inductive approach resulted in categories of results that were discussed by using relevant theories and research results.

The data were collected from an interview study conducted between 2014 and 2016. All the interviewees were civil servants who had roles in ensuring the country's societal safety and security. The 48 interviewees came from various governmental levels (central, regional, and local) within the justice sector (see Figure 1).

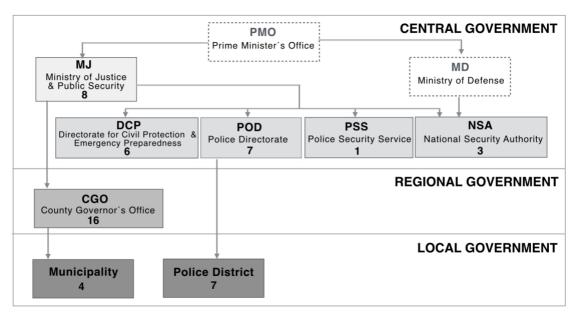


Figure 1 Number of interviewees at each governmental level

At the central level, we interviewed officials from the MJ (8), the DCP (6), the POD (7), the PSS (1), and the National Security Authority (NSA) (3). At the regional level, 16 officials from the County Governor's Office (CGO) participated. Seven police officers in various positions were interviewed at the local level.

The study offers a slice-in-time view of emergency preparedness and various activities, as several processes are still ongoing. Nevertheless, the study directs attention to several important factors that influenced the country's overall civil protection and emergency preparedness up to this point.

The interview questions included (but were not limited to) the following:

- 1. Background and experience related to civil protection and emergency preparedness.
- 2. Changes, if any, to plans, measures, practices, leadership, roles, communication, cooperation, and more in aftermath of 2011.
- 3. Drivers for change (if there were any changes).
- 4. Agencies and organizations with which the individuals and their departments work.
- 5. What is societal safety?
- 6. Challenges to improving societal safety and security.

The interviews were carried out using a semi-structured interview guide that allowed the interviewees to elaborate or raise new related issues as needed (Bryman 2012). This format also allowed the interviewers to ask follow-up questions (Bryman 2012). The interviews lasted 60-120

minutes and were transcribed in separate documents. The documents were then imported into the HyperResearch program and coded as the themes emerged.

The resulting themes, such as integration of past experiences, organizational culture, and political mechanisms, were further grouped under "culture," while resources and organizational structure were placed under "structure." The interviews that addressed similar themes (e.g., additional resources for emergency preparedness) were then compared to each other. In addition, results were compared to available evaluation reports and other documents (e.g., Office of the Auditor General's investigation of the MJ's work on civil protection). The results were discussed in the project group, and analyzed in the light of two different theoretical angles, the instrumental and institutional perspectives, which reflect the distinction between "culture" and "structure". We adopted these perspectives from public administration experts who have studied several large-scale crises in Norway (Fimreite 2014) to provide a certain degree of comparability to other studies' results. In the paper, we understand culture as having three elements: 1) language; 2) beliefs, values, and knowledge; and 3) norms and sanctions (Schiefloe 2003). Language is an integral part of a culture that enables people to convey a message to or interact with one another and exchange experiences, knowledge, and beliefs. Cooperative efforts between various groups can potentially give rise to disagreement, conflict, or divergence in understanding and impressions. The second group of elements is an intellectual edifice that constitutes the foundation for how members of the culture interpret the world and what is true, real, and possible. The third group of elements, norms and sanctions, comprise the moral aspect of the culture: what is acceptable or unacceptable and what is right or wrong. An embodiment of these norms garners approval, while violations warrant sanctions.

4 Results

We identified four interrelated major changes following the 2011 attacks: 1) a change in risk perception, 2) the generation of several number of plans and measures, 3) changes in organizational structures, and 4) increased resources for emergency planning. In this section, we present and discuss interview quotes that are representative of our findings.

4.1 A change in risk perception

Our study emphasizes a change in risk perception. Interviewees clearly stated that Norway now faces a risk of intentional actions such as terrorism. This represents a change in risk perception from before 2011. Interviewees from the CGO and the police underlined that the 2011 terrorism was a wake-up call for the public in terms of "expecting the unexpected" and preparing for the worst-case scenario. In the interviews, police officers reinforced this by describing how individuals take more seriously their police training and daily preparation for work.

My experience is that there is another risk perception today than it was five years ago. That's how I feel. Things are being taken more seriously, and it is better to think of the worst-case scenario and prepare for the worst. Perhaps, before, we had a tendency to think that everything will go well. (Police district informant)

Aside from a change in risk perception, informants communicated an increased awareness of the need to accept assistance from other agencies. Several informants across various levels emphasized the importance of cooperation. In this way, a police district interview underlined that other districts and emergency agencies are less reluctant to ask for assistance.

We are clearer in terms of our action capacity; we would rather call them in for a telephone meeting too much than do nothing and be annoyed. It is better when five or six [people] sit together and gain so much from it than to wonder why the other did not initiate contact. (CGO official)

The interviewees shared an expectation that Norway's encounter with terror would catalyze a greater degree of change than what has actually occurred in the country. A DCP informant said that the moderate degree of change in attitudes in terms of societal safety and security can be attributed to the infrequent occurrence of events of this magnitude (unlike the US, which has had several encounters with terrorism).

Despite its acknowledgment of security-related risks, the DCP continues to experience a lack of information from the security camps based on what they view as confidential versus necessary to create a broad national risk picture.

4.2 The generation of several plans and measures

Concrete measures have been implemented since 2011 (listed in Table 1). Aside from changes addressing the Gjørv Report's conclusions, the different government levels have initiated various measures and activities in response to criticisms, recommendations from other reports, and demands from higher authorities. An informant indicated that these calls for action have resulted in a matrix of tasks to accomplish and activities to be initiated, without these activities necessarily being coordinated between the levels. This means that a response to one report recommendation may stall the initiation of other activities. By way of example, the report *Politianalysen* (NOU 2013:9) recommended the increase in police competence. This brought about the Change Program (*Endringsprogram*) which included the project Operational Center Competence. Shortly after the Police Reform (*Nærpolitireformen*) was initiated (Prop. 61 LS (2014-2015)). The reform caused ongoing projects to be abandoned:

Operational Center Competence was cast aside. The reason I think was that we probably expected a merger of districts and operating centers and so on. (POD interviewee)

Many CGO interviewees identified the level of reporting as a specific change. In the course of our interviews, some suggested that the reporting demands are time-consuming and unnecessary.

We have negotiated with the regime that we will report if we have something to report. We once reported that we have nothing to report, and it's really silly. It's nice to get some practice, but that approach was changed. (CGO official)

After 2011, the Solberg administration was elected into office. According to an interviewee from the MJ, this new administration has exhibited a lower threshold for information and an increased demand for reporting from regional and local governments to the central government. The 24/7 Civil Situation Center was established with the purpose of continuously analyzing situation reports and providing information and support to the MJ. Interviewees at the lower governmental levels suggested that this increased demand for reporting is not only a result of the July 22 attacks but also politically driven decisions to show action capacity.

A CGO informant remarked that current plans and measures focus on material and more concrete solutions (e.g., police cars, helicopters, new police equipment) rather than intangible solutions, such as improved attitudes, leadership, and the use of power vested in the government. The same

phenomenon is evident upon examining the list the MJ published on its website (Table 1). According to one MJ informant, there seems to be a correlation between recent crises, political interest, and funding. The general impression of the interviewees is that over time, the effects of the Oslo and Utøya terror attacks seem to have tapered off, and this is reflected in the budget allocated for emergency preparedness.

4.3 Structural changes

After the 2011 terror attacks, the ministry and its underlying agencies (the MJ departments, POD, PSS, and the police districts) initiated several reorganizations. According to one MJ informant, one of the reasons for this was to clarify overlaps in roles and responsibilities between departments. New officials (including some external to the MJ) have replaced some leaders who stepped down after 2011. Many of the MJ informants see this change as a positive supplement to their organizational resources, as these new leaders provide additional competences and perspectives. One informant in particular stated that creating harmony between two conflicting departments at the MJ level was part of the informant's informal job description.

The majority of the MJ interviewees felt positively about the newly established weekly coordination meeting between the various MJ departments. For instance, one interviewee remarked that the formalized structure allows for an exchange of information and discussion of issues related to societal safety and security. Another interviewee reflected that since the weekly meeting was established, the cooperation between the departments has improved. Similar results have been achieved by the DCP's establishment of the National Exercise and Evaluation Forum (NØEF). Another MJ informant reflected that there is more communication within the MJ, both between sectors and between directorates, compared to a few years ago.

According to POD and police informants, the ongoing police reform seems to be creating an uncomfortable atmosphere due to employees' uncertainties regarding their positions. The POD informant stated that the ongoing centralization has led to the loss of local resource persons. Interviewees from the CGO echoed the POD informant's opinions, stating that the local networks and knowledge that have been established through years of service in the local community are in danger of being lost as the districts become larger and more centralized. Some CGO informants also expressed that the current police reform aims to prevent a repeat of July 22, rather than structure the districts to be responsive to different types of emergencies. One interviewee expressed concern about the excessive focus on terrorism and the corresponding centralization taking place to address large-scale events:

We are on the verge of organizing Norway's emergency preparedness in such a way that we may be less able to handle them. (CGO official)

Regional and local officials are also concerned that the police will not reach them rapidly enough, due to long distances and response times. In recalling the slow police response after their local police station was closed, a municipal official described the response time as "catastrophic." Another CGO informant additionally attributed the current skepticism to the experience with previous reform that also claimed to increase police efficiency and presence but failed to meet the municipalities' expectations. Contrary to this reluctance, however, some informants who welcomed the police reform expressed that decreasing the number of districts might give way to increased resources and more consistent basic police services.

4.4 Changes in resource allocation for emergency preparedness

Since the 2011 terror attacks, funding for emergency preparedness has increased. The MJ, DCP, PSS, and other central governmental units have received substantial budget increases. However, this

funding, according to the majority of CGO interviewees, fails to reach the regional and local levels. A CGO informant argued that hiring more people in the DCP does not necessarily improve Norwegian emergency preparedness, considering that the lower levels are the ones that directly respond to emergencies. The description of a top-heavy organization in terms of resource allocation resonated among all the interviewed county officials. Moreover, the law on municipal emergency preparedness transfers the responsibility for emergency preparedness to the local level, but it fails to provide any earmarked funding. A CGO official explained that this additional responsibility does not help the municipalities in prioritizing emergency preparedness issues, since their resources have remained approximately the same.

According to a CGO official, the central government officials tend to focus on large-scale accidents, whereas the regional and local governments are more concerned with local emergencies and events. The informant added that the central government's action capacity decreases "as the distance from Oslo becomes greater." A police officer also described this central-local divide: "The farther north you are, the less relevant you become."

Some interviewees expressed that the focus on and the corresponding funding for security-related measures are slowly abating, while others claim that extreme focus on intended acts still exists and in fact poses the danger of overshadowing more probable events, such as natural disasters. An MJ informant surmised that the changes in response to the 2011 terror attacks, despite the incident's tragic consequences, will eventually lose its momentum.

4.5 Past experiences shape culture and current events influence leadership focus

Some of our interviewees pointed to past experience as a driving force behind these changes. Our results shed light on a change in the way security-related risks such as terrorism have been acknowledged following the Oslo and Utøya terror attacks. Although many of the interviewees considered the 2011 terrorism incident an important driver for change, many regional officials considered other events, such as the 2004 tsunami, the 9/11 terror attacks in the USA, and several local events, as drivers for change.

The July 22 report is one thing, but as I have said, there are many events that have caused changes. The substantial flooding in the southeastern part of Norway, and storms, and the fire in Lærdal. There are several events, so it is too simplistic to trace it back to just the Gjørv Report. (CGO interviewee)

Past experience may also influence the varying police cultures and the lack of standardization, according to one MJ interviewee. The informant characterized the 27 Norwegian police districts as independent autonomies. The Norwegian police have operated for centuries as autonomous units in each district and in the local municipal police stations. Years of working with a high degree of autonomy, the informant pointed out, has resulted in little standardization and a strong need for protecting their local identity. An ongoing police reform is reducing the number of police districts at the same time that proximity to the public and local affiliation is being kept. However, the current police reform has generated resistance to change, with affected municipalities and sheriff's offices opposing the reform. In addition, one MJ informant remarked that change was acceptable to the municipalities and police stations so long as it did not directly affect them.

In identifying the drivers of change after the 2011 attacks, an interviewee stated that July 22 was not the only factor that drove governmental changes and suggested that current events get more attention and thus become the focus of activities and funding.

It can be a political mechanism for making oneself more visible, because that is another driver in some cases, to make oneself more publicly present. If you are visible, you are relevant, if you know what I mean. (NSA official)

4.6 Structure and culture foster a lack of coordination between ministries

Our results revealed discord between the police and the military. An interviewee ascribed the strife between these two groups to the allocation of resources. The POD informant, for example, found it difficult to understand why the military should build up resources to help the police instead of letting the police build the resources themselves. An NSA informant also indicated that the military is reluctant to let the MJ involve themselves in emergency preparedness efforts within their sector. This reluctance seems to stem not only from resource limitations but also to varied understandings of what societal safety and security entail. A DCP informant attributed the friction between the DCP and the PSS to the difference in their priorities. Many interviewees pointed to a rift between safety experts and security experts.

Although the MJ is responsible for leading the cooperation between sectors in emergency preparedness work, the interviews revealed that the other ministers place more priority on achieving their own sectorial goals than on engaging with the priorities of other ministries. As a result, helping the MJ with its role in cooperation has no value to the other ministries.

On behalf of the MJ, the DCP audits the emergency preparedness of various sectors. A DCP informant noted that strong sectorial alignment cultivates a culture in which individuals pride themselves on their competence within their field. As a result, when other ministries step into their scope of expertise, they generate agitation.

We have had our rounds with a certain department. They are experts in their field and have a lot of resources, and they would like us to focus on everything else besides their area of responsibility. (DCP official)

The role of the MJ as a driving force for cooperation in emergency preparedness between sectors takes a more giving and a rather less demanding character. According to one MJ interviewee, it is easier to provide services in terms of courses, assistance, and facilitation during exercises than to set requirements or request deliverables from other sectors. Furthermore, the interviewee suggested that sectorial responsibility overshadows the need for inter-sectorial cooperation.

The MJ's preoccupation with improving its own sector falls short of creating synergy and clarifying expectations for other sectors, according to a DCP interviewee. Some informants, however, communicated an increase in the MJ's commitment as a coordinator for societal safety and security and improved interaction between the ministries and their underlying agencies. One MJ interviewee also believed that new leaders may have contributed to culture changes. Another informant suggested that the change in leaders was a likely product of both the random and deliberate reshuffling of leaders. The informant remarked that the reorganization and the influx of new people into the NSA have contributed to the change in how the NSA interacts with the DCP.

5 Discussion

Our study results indicate several developments in Norway's civil protection and emergency preparedness, however, some aspects are more easily changed than others. Evidence shows that each sector's persisting sectorial focus and pride in its respective area of expertise act as a stumbling block to cooperation efforts. These turf wars are brought about by formal frameworks and cultures with conflicting views, values, and priorities. Additionally, the excessive weight given to the latest crisis results in sectors overlooking more pressing issues in society. The same applies to the challenge

of balancing emergency preparedness for large-scale accidents and for smaller but more frequently occurring events.

In order to understand the changes that have taken place since July 22, we analyzed the changes using two approaches: the instrumental approach and the institutional approach (Table 2). The instrumental perspective focuses on formal organizations and views organizations as tools for leaders to achieve their goals (Fimreite 2014). This perspective examines members of an organization following a logic of consequence, as one tries to predict the possible consequences of a specific action using a means-end rationality (Christensen, Lægreid et al. 2007:3). Furthermore, the instrumental perspective considers an individual's choice of action as having limitations (Christensen, Lægreid et al. 2007, Fimreite 2014). The goals are provided to the organization, while the organization's role is to find a suitable means to reach those goals (Fimreite 2014). Thus, changes occur as a result of rational adjustment to shifting goals and external pressures (Christensen, Lægreid et al. 2007:3).

The institutional perspective, on the other hand, examines the norms, values, and practices that have developed over time. This perspective holds that organizations are very challenging to transform. Thus, change is developed gradually, in accordance with the organization's core values and identity (Selznick 1957, Lindblom 1959, Fimreite 2014). According to this perspective, members behave based on the logic of appropriateness: what is considered "fair, reasonable, and acceptable in the environment the person works within" or what has worked well in the past from experience (Christensen, Lægreid et al. 2007:3). Moreover, the institutional perspective follows path-dependent processes in which past institutional decisions limit subsequent alternatives (Krasner 1988, Fimreite 2014). Thus, individuals' inclinations and capacities are better understood in light of the institutional framework in which the individual operates (Krasner 1988:72).

Table 2 Instrumental and Institutional perspectives (Christensen, Lægreid et al. 2007)

	Instrumental	Institutional
View of the organization	The organization is a tool for leaders.	Organizations should be viewed from a cultural perspective, as each organization has its own institutional rules, traditions, values, and norms.
Logic of action	Logic of consequence: organizational structure imposes limits on an individual's rationality.	Logic of appropriateness and a path-dependent process: Actions are taken in accordance with past experience or what is fair, reasonable, and acceptable.
Goals and organizational change	Exogenously formulated by leaders: policy-making is for finding a means to reach the goals.	Goals develop gradually in the organization. Policy is about forming opinions and discovering goals.
-	Change as a rational adjustment to new goals and managerial signals and external pressure: changes are influenced by leaders' control and negotiations (interests, compromise between actors with partly conflicting goals).	Organizations are robust and change gradually. They are independent from leaders' decision- making behavior.

5.1 Instrumental perspective

Norway's challenges in coordinating, communicating, and understanding various governmental roles and responsibilities have been repeatedly described in preceding events and exercises (NOU 2000; DCP 2006; Christensen et al. 2013, 2015). After 2011, reorganization at various levels in the justice sector, including the MJ, POD, PSS, and the police districts, were initiated. The reorganization can be seen as an attempt to address problems, however, it can also be seen in light of other factors, such as an attempt by new leaders to show political vigor or a way for leaders to exhibit action capacity. Therefore, the reform may not necessarily have a substantial effect.

From the instrumental perspective, formal changes, such as introduction of the principle of cooperation, white papers, reports, and evaluations with recommendations, are some ways to

achieve the government's goals regarding societal safety and security. The renaming of the MJ was a move to signal and emphasize the body's role as a driver for change in emergency preparedness across sectors.

Norway's administrative system exemplifies the compartmentalization of ministries that is common to many countries. Although countries such as Sweden, Germany, the Netherlands, Great Britain, Switzerland, and the USA have national frameworks designed for handling their country's specific societal issues, these frameworks coincide in that they face impediments created by grey areas in responsibilities, poor coordination, and a lack of transparency (Hovden 2004). The problem does not emanate from the sectorial grouping per se, but rather from a siloed design that lacks overarching elements that advocate coordination and cooperation. Organizational structure becomes a stumbling block to coordination between sectors when the principle of responsibility achieves dominance over the other principles. The strong vertical alignment of the ministries promotes "non-interference" or negative coordination (Scharpf 1994) as a tactic for avoiding conflict between their respective terrain (Christensen et al. 2015). The minister of each sector has a significant amount of power and ability to decide whether or not an action takes place. The MJ's responsibility in leading the cooperation between sectors thus becomes an arduous task, as representatives must walk on eggshells when addressing other sectors regarding their areas of expertise. Consequently, the very principle of responsibility may be hindering cooperation.

Political leaders are often caught between a rock and a hard place. In effort to ensure citizens' well-being, good leaders are expected to learn from lessons after a crisis, achieve performance goals, make the right decisions, heed warnings, and prepare for worst-case scenarios (van Thiel, Leeuw 2002, Boin and t'Hart 2003). These tasks often become very challenging, if not impossible, to achieve due to bounded rationality (March and Simon 1958; Simon 2000), conflicts of interest, possible public scrutiny, and blame (Boin and t'Hart 2003). Scandals and public scrutiny in particular may cost politicians votes and, at worst, their position. With the many complex and concurrent societal issues that governments must consider, it is easy to be confined to measuring success by focusing on measurable targets (Almklov and Antonsen 2010).

Moreover, successful crisis prevention is a thankless task, since non-events receive little or no attention from the media and the general public (Boin and t'Hart 2003). Furthermore, leaders find themselves trapped in situations where they cannot win: if they implement costly measures, they face the danger of being described as overreacting (or even hysterical, as one Norwegian newspaper characterized the plan to secure a government complex before the 2011 bombing), whereas the failure to do so results in blame in the event of a crisis. Thus, their decision-making is influenced by diverse factors, including their proximity to the hazard, their level of authority (Rosness 2009), their desire to keep or obtain power, and their eagerness to present themselves in a positive light (Brunsson 1989).

Formalized processes encourage interaction, cooperation, and understanding. Moreover, they allow for better insight into certain cross-boundary issues. The DCP's National Exercise and Evaluation Forum and the MJ's weekly meetings serve as examples of structures that provide face-to-face interaction which, over time, can influence culture.

The changes after 2011 were not solely influenced by the July 22 terror attacks. Both previous and subsequent crises, including both international and local events, have served as external driving forces of change. Most of these measures were material, observable, and easily accomplished. Emergency preparedness as a policy area generally receives attention after a crisis, rather than before one. It is not politically rewarding to favor long-term plans that do not serve the leaders' political interests. Political leaders in general, due to conflicting interests and short political lifespans, tend to favor measures that provide visible results, rather than expensive long-term plans that take

time. This is demonstrated in the visible measures that the MK has implemented: the purchase of armored cars and helicopters, increased staffing, and increased training activities (MJ 2016).

Since 2011, several governmental units have received a significant lift in their budgets for emergency preparedness, however, the interview data points to a bottleneck in terms of resources from the regional to the local communities. Though the local communities have faced increases in the number of tasks and amount of reporting for which they are responsible, they lack the necessary financial support. These additional responsibilities must be matched with the proper resources. The local communities and regions cannot depend exclusively on the local economy and volunteer work. While the resources are there, they are not apportioned adequately as things stand.

When it comes to providing recommendations, investigation groups should be careful, as these recommendations are tools that may cause unexpected consequences. Over the years, the MJ has initiated activities and measures at different levels based on criticisms and recommendations published in various reports. The introduction of new measures in response to events and reports in the absence of adequate planning and strong cooperation may have the effect of slowing down existing activities, as was the case with the operational center competence program, which was put on the backburner in light of the ongoing police reform. The gradual decrease in security-related funding indicates a gradual loss of the momentum brought about by the July 22 terror attacks. This may be because current events engulf the limited attention of politicians, who in turn are influenced by several political mechanisms. In this vein, the recent terror attacks in many parts of Europe (at the time of writing) may revive interest in security issues.

This study also found that new leaders may provide additional perspective and competence and thus provide a way to change pre-existing power bases. This may explain the positive reception of the structural reform within the MJ. Furthermore, more recent threats, which are perceived as more immediate to decision-makers, may explain why decisions made after 2011 focused heavily on security issues and investments that are more relevant to the central government and situated close to the capital.

As seen in this case, reforms are usually implemented following a major event or in response to criticism. For example, leaders often initiate reorganization programs to demonstrate that they are capable of initiating change and improving current shortcomings (March, Olson 1983). The matrix of actions may be a combination of a risk regulation reflex (de Ridder and Reinders 2014) and recommendations that have piled up over the years. Crises, as windows of opportunity, bring a combination of people, problems, and solutions together at a point in time (Kingdon 1995). Similarly, this ad hoc process within an organization results in a garbage can process of decision-making whereby actors, problems, and solutions meet temporally (Cohen et al. 1972). Hovden (2004) described how incremental changes over the years have resulted in a highly convoluted "jungle" of safety institutions lacking the capacity to address threats and changes in post-war Norway.

Basic police services have varied considerably due to the autonomy of the "27 kingdoms". On the one hand, the police reform has the ability to create standardization of police services. Larger districts are also able to access a larger pool of resources. On the other hand, the ongoing centralization poses a threat to local knowledge, competences, and networks in small communities. Holmberg (2014) claims that reforms in Scandinavian countries take a form of centralization that cripples local policing. Similar cases in Denmark (reduced districts from 54 to 12) and Norway (reduced districts from 54 to 27) revealed that reducing districts can instead lead to increased costs, loss of competences, loss of local knowledge, and decreased preventive work (Holmberg and Nielsen 2011, Holmberg and Balvig 2013, Holmberg 2014). The effects of the current structuring reforms remain to be seen.

The varying resources and capacities of the municipalities influence the quality of local efforts in emergency preparedness (Pettersen and Betten 2015, Wasilkiewicz et al. 2015). Within the municipalities, as resources are limited, safety and security work in the local community must compete with several other priorities for which the municipality is responsible, such as health care and education services. Edwards and Jabs (2009) described safety as hard to observe or prioritize because safety is "measured with an inverted scale." Unlike reaching performance goals or staying within the organization's financial framework, staying safe is rarely rewarded (Edwards and Jabs 2009).

5.2 Institutional perspective

Although leaders may attempt to control or change the culture, they can only adjust its trajectory (Martin and Siehl 1983). Culture affects what is prioritized and how various groups interact. Cultural interfaces, such as military-police, central-local, and safety-security camps, can impede cooperation [for a more in-depth discussion, see Almklov al. (in review)]. Cultural elements, such as language, knowledge, and norms, hint at discordance between the various cultures. In some cases, the cultures vary considerably due to each sector's understanding of its roles, responsibilities, and contributions to the country's civil protection and emergency preparedness. The strong principle of accountability encourages siloed thinking and thus propagates existing turf wars and hinders cross-sectorial cooperation. Moreover, the empirical study suggests that the MJ's culture is characterized by excessive introspection, which increases the propensity for examining its own activities without using its competence to improve the organization at the lower levels.

Cultural conflicts between organizations pose a major challenge to multi-agency cooperation (Ranade and Hudson 2003, Atkinson et al. 2005, Curnin et al. 2015). To explain how cultures can influence societal safety and security, we view culture as having three elements: 1) language; 2) beliefs, values, and knowledge; and 3) norms and sanctions (Schiefloe 2003). Schiefloe (2003) describes language as an integral part of a culture that enables people to convey a message to or interact with one another and exchange experiences, knowledge, and beliefs. Cooperative efforts between groups from different backgrounds, geographical areas, and areas of expertise may use dissimilar languages that can potentially give rise to disagreement, conflict, or divergence in understanding and impressions. The second group of elements is an intellectual edifice that constitutes the foundation for how members of the culture interpret the world and what is true, real, and possible. The values of a culture become hidden, and yet they remain pervasive standards for group or individual evaluations of alternatives. The third group of elements, norms and sanctions, comprise the moral aspect of the culture: what is acceptable or unacceptable and what is right or wrong. An embodiment of these norms garners approval, while violations warrant sanctions (Schiefloe 2003).

The three elements of culture may affect the decisions made by Norway's political leaders, the manner in which information is exchanged, how decision alternatives are evaluated based on the logic of appropriateness, and how the alternatives are measured against the values and beliefs of individuals and the society. As an emerging phenomenon, culture is integrated into the characteristics of the interactions between groups within organizations (Whittingham 2008). Thus, changing the leadership does not change the norms and values of organizations overnight. To some extent, culture may be influenced by structuring lines of communication and day-to-day interactions. Cultural changes take time, as organizations tend to hold onto the status quo, as exemplified by the resistance to change demonstrated by the small municipalities and sheriff offices in response to their merging into larger districts.

Cline (2000) advocates face-to-face communication as a way to resolve conflict and increase cooperation. This may explain why the established communication arenas got positive feedback from

the interviewees. By increasing the opportunity for this form of information exchange and interaction, trust can be built. Moreover, face-to-face communication fosters reciprocity and agreement, which is needed in the implementation of joint processes (Ostrom 1998). These factors in turn positively reinforce cooperation between groups or individuals that may have conflicts of interest (Cline 2000). In addressing a large-scale crisis, cooperation and operation beyond the normal confines of an organization are vital (Kapucu and Garayev 2011). Accordingly, multi-agency cooperation may be set back during disaster response in cases where the agencies do not work together on a daily basis (Steigenberger 2016). Aside from differences in cultures and priorities within the MJ and among the different sectors and agencies, cooperation is also hampered by their lack of interaction.

Past experiences influence how problems and solutions are identified (Sabatier 2007; Rosa et al. 2013). Norway's experience with terror in 2011 posed security-related issues as immediate problems to consider. Furthermore, historical context also affects risk perception: what was considered acceptable a decade ago may be unacceptable today, and vice versa. Norway's encounter with terror has fostered the attitude of expecting the unexpected or imagining the worst-case scenario when it comes to emergency preparedness training and police response preparations, an attitude that would have been treated as an exaggeration prior to July 22. From these examples, it is clear that institutions' cultures and structures are affected by political history.

Due to the difficulty inherent in decision-making, politicians tend to muddle through decisions by recycling old solutions and adjusting them to suit their preferences (Brunsson 1989; Lindblom 1959) or by applying the same solutions to problems that are by nature different (March and Olson 1983, Rosness 2009). Such solutions include stepping down, implementing structural reforms, establishing additional agencies, and introducing new regulations. In its A Vulnerable Society report, the Willoch Commission recommended that the responsibility for emergency preparedness be taken from the MJ and given to a separate department. Instead of implementing this radical change, the government opted to implement smaller adjustments. The choice to rename the MJ and emphasize its responsibility in driving collaboration between sectors in the area of emergency preparedness through royal decrees and white papers suggests an inclination to muddle through. In addition to muddling through, the institutional perspective describes processes as path-dependent, whereby previous decisions in the government's structural design and legal jurisdictions affect the options available to the current government. Initiating plans and measures within the MJ and collaborating in areas that do not step on other sectors' domains (negative collaboration) becomes the logic of action as the MJ tries to keep its actions acceptable to others around them. The introduction of the principle of cooperation, as seen in this case, has a limited effect due to the earlier introduction of the principle of sectorial responsibility and the strong ministerial culture it has created. Thus, culture, like formal structure, affects decisions and ultimately influences who gets the resources, the type of policies adopted, and interactions.

6 Conclusion

In our study, we observed several attempts to address the major inadequacies highlighted in the Gjørv Report's broadly stated conclusions, especially those regarding security-related risks. Several plans and activities have been generated with the intent of acknowledging risks, learning, and achieving competence in emergency preparedness through various exercises, although the success of these actions remains to be seen. The Gjørv Report's main conclusion called for a change in attitudes, culture, leadership, and exercise of authority, as well as a better correlation between words and actions. The initiated plans and actions, however, fail to touch on these more intangible aspects of emergency preparedness. We found that the various sectors' ability to coordinate and work together remains problematic, as sectorial responsibility remains dominant over the principle of cooperation. Our findings align with the findings of Fimreite et al. (2014) and the report from the

Office of the Auditor General (Riksrevisjonen, 2015). Information-sharing, and especially that related to sensitive data, continues to pose challenges related to balancing confidentiality and creating a comprehensive national risk picture. Information and communication technology (ICT), together with other resources allocated to emergency preparedness, has increased. Despite the leaders' willingness to clarify responsibilities and set goals and measures within their own areas of responsibility, the invisible but powerful boundaries between sectors continue to thwart cross-sectorial cooperation.

Analyzing the results from the institutional and instrumental perspectives allows us to generate a better understanding of the developments taking place. Moreover, it explains why some elements remain relatively unchanged. The government's formal frameworks create an invisible barrier that hinders cross-sectorial cooperation. Due to formal responsibilities assigned to sectors and the cultures fostered within governmental organizations, cooperation remains a major challenge. The gap between the central and local governments continues to exist because their resources and focuses vary: while the central government is currently focusing on large-scale events, local governments are more focused on issues that directly affect them. Unfortunately, because of institutional and instrumental factors that interact in an unpredictable manner, drastic changes occur rarely. Moreover, implementing institutional changes takes time. With wisely chosen policies that promote better cooperation between sectors and a better understanding of how structure can influence institutions, and vice versa, Norway's societal safety and security can gradually move forward. Since the next disaster is as good as anyone's guess, striking a balance between focusing on large-scale events and local events, and between safety and security, is a crucial element in emergency preparedness.

Societal issues of today span across borders, and become increasingly complex, uncertain, and intractable (Renn and Klinke 2004, Head and Alford 2015:2). Reflecting on Olsen et al.'s (2007) definition of societal safety and security, which was given in the introduction to this paper, maintaining critical social functions, regardless of the threat, is central to protecting citizens' lives, health, and basic needs. Whether from terrorism, malicious actions, floods, disease, fires, or Taleb's (2007) "black swans" (i.e., rare and unpredictable events), the government's role in civil protection and emergency preparedness encompasses both safety and security. To obtain considerable change, safety and security issues must be strengthened comprehensively at the local, regional, and national levels.

Successfully dealing with societal safety and security issues requires a common understanding of what societal safety and security encompass, as well as how they can be achieved. This understanding will serve as a foundation for reaching consensus on actions and strengthen the sense of commitment to the safety and security of society. Cultural differences need not provoke countless demarcations between groups and boundaries. Expertise in various fields and different demographic identities should instead be utilized as a source of additional insight in understanding the same societal issues. Moreover, the strength of one agency should be drawn to compensate for the weakness of another. Finally, wicked problems need wicked solutions, and by wicked we mean jointly "attacking" safety and security issues in a coordinated fashion, but from various angles, using a requisite variety (Ashby 1958) of strategies on an open and dynamic system called society.

Acknowledgment

This work was conducted as part of the NEXUS project (The Next Disaster – Cooperation and Action Capacity in Norway After the July 22 Terror Attacks). The NEXUS project is financed by the Research Council of Norway within their 'SAMRISK' program.

7 References

22 July Commission. (2012, August 13). Report of the 22 July Commission [Press Release]. Oslo: Regjeringen. Retrieved from:

https://www.regjeringen.no/html/smk/22julikommisjonen/22julikommisjonen no/en/content/dow nload/434/3526/version/2/file/press release 22 july commissio.pdf

Aalberg, A.L., Bye, R.J, & Nyheim, O.M. Barriers for organizational learning in the Norwegian police sector after the 22/7 terror events. In review.

Almklov, P.G., & Antonsen, S. (2010). The commoditization of societal safety. *Journal of Contingencies and Crisis Management*, 18(3): 132-144.

Almklov, P.G., Antonsen, S., & Bye, R. Collaborating with the others. Cultural differentiation as an interactional process. In review.

Antonsen, S. (2009). Safety culture and the issue of power. Safety Science, 47(2): 183-191.

Ashby, W.R. (1958). Requisite variety and its implications for the control of complex systems. *Cybernetica*, 1(2): 83-99.

Atkinson, M., Doherty, P., & Kinder, K. (2005). Multi-agency working models, challenges and key factors for success. *Journal of Early Childhood Research*, *3*(1): 7-17.

Birkland, T. (2006). Lessons of disaster: Policy change after catastrophic events. Washington, DC: Georgetown University Press. Retrieved from http://www.ebrary.com

Birkland, T.A., & Lawrence, R.G. (2009). Media framing and policy change after Columbine. *American Behavioral Scientist*, *52*(10): 1405-1425.

Birkmann, J., et al. (2010). "Extreme events and disasters: a window of opportunity for change? Analysis of organizational, institutional and political changes, formal and informal responses after mega-disasters." <u>Natural Hazards</u> **55**(3): 637-655.

Bodensteiner, C.A. (1995). Predicting public and media attention span for social issues. *Public Relations Quarterly*, 40(2): 14.

Boin, A. et al. (2006). The politics of crisis management. Cambridge: Cambridge University Press.

Boin, A. et al. (2009). Crisis exploitation: Political and policy impacts of framing contests. *Journal of European Public Policy*, 16(1): 81-106.

Boin, A., & P. t'Hart (2003). Public leadership in times of crisis: Mission impossible? *Public Administration Review*, *63*(5): 544-553.

Brunsson, N. and Olsen, J. P. 1993. The Reforming Organization, New York, London: Routledge.

Bryman, A. (2012). Social research methods. New York: Oxford University Press.

Christensen, T. et al. (2007). Organization theory and the public sector: Instrument, culture and myth. New York: Routledge.

Christensen, T., Lægreid, P., & Rykkja, L.H. (2013). After a terrorist attack: Challenges for political and administrative leadership in Norway. *Journal of Contingencies and Crisis Management*, *21*(3): 167-177.

Christensen, T., Lægreid, P., & Rykkja, L. H. (2015). The challenges of coordination in national security management—the case of the terrorist attack in Norway. *International Review of Administrative Sciences*, 81(2): 352 – 372.

Cline, K.D. (2000). Defining the implementation problem: Organizational management versus cooperation. *Journal of Public Administration Research and Theory, 10*(30): 551-571.

Cohen, M.D., March, J.G., & Olsen, J.P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, *17*(1): 1-25.

Corbin, J.M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1): 3-21.

Curnin, S., Owen, C., Paton, D., Trist, C., & Parsons, D. (2015). Role clarity, swift trust and multiagency coordination. *Journal of Contingencies and Crisis Management*, 23(1): 29-35.

DCP – Directorate for Civil Protection. (2006). Øvelse Oslo 2006 Evaluering. Report from the Norwegian Directorate for Civil Protection. Tønsberg: Directorate for Civil Protection.

DCP – Directorate for Civil Protection. (2012). Evaluering av krisehåndteringen etter hendelsene i Regjeringskvartalet og på Utøya 22. juli 2011, innenfor DSBs ansvarsområder. Report from The Norwegian Directorate for Civil Protection. Tønsberg: Directorate for Civil Protection.

de Ridder, K., & Reinders, S. (2014). Regulation, oversight, and the risk regulation reflex. An Essay in Public Administration in the Context of the Dutch Risk and Responsibilities Programme, Rijksuniversiteit Groningen.

Edwards, M., & Jabs, L.B. (2009). When safety culture backfires: Unintended consequences of half-shared governance in a hightech workplace. *The Social Science Journal*, 46(4): 707-723.

Fimreite, A.L. (2014). Organisering, samfunnssikkerhet og krisehåndtering. Oslo: Universitetsforlaget.

Glaser, B.G., & Strauss, A. (1967). The discovery of ground theory. Chicago: Aldine Publishing Company.

Helsetilsynet (2014). Rapport fra tilsyn med samfunnssikkerhets- og beredskapsarbeidet i Justis- og beredskapsdepartementet. Report from the Norwegian Board of Health Supervision. Oslo: Statens helsetilsyn.

Head, B.W., & Alford, J. (2015). Wicked problems implications for public policy and management. *Administration & Society*, *47*(6): 711-739.

Helsloot, I. et al. (2012). Mega-crises: Understanding the prospects, nature, characteristics, and the effects of cataclysmic events. Springfield: Charles C Thomas.

Hole kommune (2012). Refleksjoner og læring for Hole kommune etter Utøya-hendelsen 22/7-11. Report from Hole municipality.

Hovden, J. (2004). Public policy and administration in a vulnerable society: regulatory reforms initiated by a Norwegian commission. *Journal of Risk Research*, 7(6), 629-641.

Kapucu, N., & Garayev, V. (2011). Collaborative decision-making in emergency and disaster management. *International Journal of Public Administration*, *34*(6): 366-375.

Krasner, S.D. (1988). Sovereignty an institutional perspective. *Comparative Political Studies, 21*(1): 66-94.

Kuhnle, S. (2000). The Scandinavian welfare state in the 1990s: Challenged but viable. *West European Politics*, 23(2): 209-228.

Lindblom, C.E. (1959). The science of "muddling through." *Public Administration Review, 19*(2): 79-88.

Lingard, L., Albert, M., & Levinson, W. (2008). Grounded theory, mixed methods, and action research. *The BMJ, Volume* 337 459-461

March, J.G., & Simon, H.A. (1958). Organizations. New York: Wiley.

March, J.G., & Olson, J.P. (1983). Organizing political life: What administrative reorganization tells us about government. *American Political Science Review*, 77(2): 281-296.

Martin, J., & Siehl, C. (1983). Organizational culture and counterculture: An uneasy symbiosis. *Organizational Dynamics*, 12(2): 52-64.

MJ – Ministry of Justice. (2016). Oppfølging etter 22. Juli: De viktigste tiltakene. Retrieved from https://www.regjeringen.no/no/tema/samfunnssikkerhet-og-beredskap/innsikt/oppfolging-etter-22-juli/id2508054/

MJ – Ministry of Justice. (2012). Evaluering: Justisdepartementets håndtering av hendelsene 22. juli 2011. Report from the Ministry of Justice. Oslo: Ministry of Justice.

Moynihan, D.P. (2009). The response to Hurricane Katrina. International risk governance council. Geneva, Switzerland: International Risk Governance Council.

NOU 2000: 24 Et sårbart samfunn. Utfordringer for sikkerhets- og beredskapsarbeidet i samfunnet. Oslo, 2000.

NOU 2012:14 Rapport fra 22. juli-kommisjonen. Oslo, Departementenes servicesenter – informasjonsforvaltning

NOU 2013:9 Ett politi – rustet til å møte fremtidens utfordringer. Politianalysen. Oslo, Departementenes servicesenter – informasjonsforvaltning

Olsen, O. E., Kruke, B. I., & Hovden, J. (2007). Societal safety: Concept, borders and dilemmas. *Journal of Contingencies and Crisis Management*, 15(2), 69-79.

Olshansky, R.B. (2006). Planning after hurricane Katrina. *Journal of the American Planning Association*, 72(2): 147-153.

Oslo kommune (2011). Evalueringsrapport. Oslo kommunes erfaringer med hindering av bombeangrepet ved Regjeringskvartalet og konsekvensene av skytingen på Utøya 22.7.2011. Report from Oslo municipality. Oslo: Oslo municipality.

Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action: Presidential address, American Political Science Association, 1997. *American Political Science Review*, 92(1): 1-22.

Perrow, C. (1984). Normal accidents: Living with high-risk technologies. New York: Basic Books.

Pettersen, K.V., & Betten, T. (2015). Samfunnssikkerhet og beredskap – læring og endring i kommunal sektor. Trondheim: NTNU.

POD – Politidirektoratet (2012). Evaluering av politiets innsats. Report from Politidirektoratet. Oslo: Politidirektoratet.

PST – Politiets sikkerhetstjeneste. (2012). Evalueringsrapport. Report from the Norwegian Police Security Service. Oslo: Politiets sikkerhetstjeneste.

Ranade, W., & Hudson, B. (2003). Conceptual issues in inter-agency cooperation. *Local Government Studies*, *29*(3): 32-50.

Rasmussen, J. (1997). Risk management in a dynamic society: a modelling problem. *Safety science*, 27(2), 183-213.

Renn, O., & Klinke, A. (2004). Systemic risks: A new challenge for risk management. *EMBO Reports*, *5*(1S), S41-S46.

Riksrevisjonen (2015). Riksrevisjonens undersøkelse av Justis- og beredskaps-departementets arbeid med samfunnssikkerhet og beredskap. Report document 3:7 (2014–2015), the Office of the Auditor General. Bergen: Fagbokforlaget AS

Rosa, E., McCright, A., & Renn, O. (2013). The risk society revisited. Philadelphia: Temple University Press.

Rosness, R. (2009). "A contingency model of decision-making involving risk of accidental loss." <u>Safety science</u> **47**(6): 807-812.

Rykkja, L.H., Lægreid, P., & Lise Fimreite, A. (2011). Attitudes towards anti-terror measures: The role of trust, political orientation and civil liberties support. *Critical Studies on Terrorism*, 4(2): 219-237.

Samuels, R.J. (2013). 3.11: Disaster and change in Japan. New York: Cornell University Press.

Scharpf, F.W. (1994). Games real actors could play positive and negative coordination in embedded negotiations. *Journal of Theoretical Politics*, *6*(1): 27-53.

Schiefloe, P.M. (2003). Mennesker og samfunn. *Innføring i sosiologisk forståelse*, *3*. Bergen: Fagbokforlaget.

Selznick, P. (1957). Leadership in administration: A sociological interpretation. California: University of California Press.

Simon, H. A. (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society*, 1(1): 25-39.

Steigenberger, N. (2016). Organizing for the big one: A review of case studies and a research agenda for multi-agency disaster response. *Journal of Contingencies and Crisis Management*, 24(2): 60-72.

t'Hart, P. (2013). After Fukushima: reflections on risk and institutional learning in an era of megacrises. *Public Administration*, *91*(1): 101-113.

Taleb, N.N. (2007). The black swan: The impact of the highly improbable. New York: Random House.

Twigg, D.K. (2012). The Politics of Disaster. Gainesville: University Press of Florida.

Van Thiel, S., & Leeuw, F.L. (2002). The performance paradox in the public sector. *Public Performance & Management Review*, *25*(3): 267-281.

van Tol, J. (2016). Dutch Risk and Responsibility programme. Some research into citizens' views on a proportionate handling of risks and incidents. *Journal of Risk Research*, 19(8): 1014-1021.

Walgrave, S., & Van Aelst, P. (2006). The contingency of the mass media's political agenda setting power: Toward a preliminary theory. *Journal of Communication*, *56*(1): 88-109.

Wasilkiewicz, K., Øren, A., Albrechtsen, E., Almklov, P.G., & Mohammad, A.B. (2015). On a new regulation for municipal emergency preparedness in Norway. <u>Safety and Reliability of Complex Engineered Systems</u>, CRC Press: 271-279.

Whittingham, R.B. (2008). Preventing corporate accidents: An ethical approach. Oxford: Elsevier Ltd.

Wittneben, B.B. (2012). The impact of the Fukushima nuclear accident on European energy policy. *Environmental Science & Policy*, *15*(1): 1-3.

Wollebæk, D., Enjolras, B., Steen-Johnsen, K., & Ødegård, G. (2012). After Utøya: How a high-trust society reacts to terror - trust and civic engagement in the aftermath of July 22. *PS: Political Science & Politics*, 45(1): 32-37.

Ölcer, D. (2010). "Political Competition and Government Expenditure in Resource Rich Countries." Retrieved from http://isites.harvard.edu/fs/docs/icb.topic718237.files/Memo Political Economy Workshop.pdf.