Police Coordination in Crises

Who knew what, when, where and why in managing the terrorist attacks in Oslo and Utøya in 2011?

Helge Renå

Avhandling for graden philosophiae doctor (ph.d.)
Universitetet i Bergen
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Navn: Helge Renå

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Abstract

Why did not the police mobilize more capacities more swiftly on 22 July, 2011? And why was there a lack of coordination by the police in its response to the two terrorist attacks ("22/7")?

Building on a unique and rich set of data material that document the sequence of events as they happened in real time, this thesis challenges the widely shared view of a failed police response, which has been the dominant perspective in Norway in the aftermath of 22/7. Many of the decisions and actions that were taken by the police certainly seem unreasonable and contradictory *in hindsight.* However, this thesis argues that what may seem as contradictory actions in crisis responses at the aggregate level stem from actions that were reasonable for the individuals at the time they enacted their actions given their preconceptions of the roles they had in the organization, their designated role in the actual operation, their physical location and what information they had at that point in time.

The goal of this thesis goes beyond providing a rich descriptive account of how the police responded to 22/7, and contends that existing research on crisis coordination has paid too little attention to the notion of time. Answering the "why"-question of crisis coordination is not only a matter of examining the "what" and the "how", we also need to examine and take into account the "when". Theoretically, the argument of this thesis differs from conventional accounts on coordination by taking into account the multidimensional role of time in crisis coordination. This is done by taking time as the locus for the analysis, and developing a multiple streams framework. Crisis coordination is not perceived solely as a sequential, linear process, but as a process that comprises streams of problems, capacities and information that may (or may not) get coupled on many different locations at different points in time as the crisis response proceed.

The thesis finds that the pre-crisis coordination, i.e. pre-existing crisis coordination structures and practices, significantly constrained the possibilities for the police to enact a swift mobilization, and a coordinated response to 22/7.

Moreover, an important part of the explanation why the police coordinated its response to the terrorist attacks as it did is the timing of (directive) actions and couplings: when actions to bring about coordination was taken; what capacities were coupled to what problems when; and, what information was coupled to whom when – who knew what, where and when.

Keywords: Coordination, Crisis management, Information Sharing, Timing, Coupling, 22 July Attacks, Streams.

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List of abbreviations and central concepts

AMK-center	The operation center for the ambulance services.
CCG	Crisis Command Group. Is established in the event of extraordinary incidents. The function exists both within each local police district and in the POD and the police agencies at the national level.
Delta	The national anti-terrorism police
Incident Commander	The one who has the overall command at the incident scene. It is always a police officer.
OC	Operations Center
Operations Commander	The police officer in command at the Operations Center
POD	The national police directorate
UEH-unit	Task unit in the local police districts specialised in handling terrorist attacks and sabotages, in bodyguard services and in securing vital objects under threat
110-central	The operation center for the Fire and Rescue Services

Preface and acknowledgements

Why did the police respond as they did? And how was it possible? For instance, that they had no helicopter available, that they were reluctant to mobilize even though the political power center had been subject to a deadly attack, and why did not they retrieve more boats from early on in police operation Utøya? These were questions that became increasingly prevalent in the public debate and mainstream media in the months following 22/7. The critical questions ended when the 22 July Commission released its report: "The government's ability to protect the people at Utøya failed. A swifter response by the police was in fact possible. The perpetrator could have been stopped earlier on 22/7" (NOU, 2012, p. 15). The report yielded detailed descriptions of what had happened, and its assessments and conclusions were widely praised by the media, the governmental authorities and the general public.

After the public release of the report from the 22 July Commission, the public and the media no longer wondered why the police responded as they did. And, put bluntly, the politicians were playing the blame game and competing on how to best follow up the recommendations from the 22 July Commission. However, there were some critical voices (see Renå 2017 for an overview), but they received limited attention. Personally, upon the first read of the report I found that the report gave a too simple account of why the police in particular, and the governmental authorities more generally, responded as they did. Intrigued by a seminar at the Department of Political Science held by Olav Njølstad, who had been a member of the secretariat of the 22 July Commission, and encouragements from my supervisor on the master thesis, Jostein Askim, I started playing with the idea of designing a PhD proposal on the police response (initially the ambulance services were also included). A few months later I had a PhD position, some empirical puzzles and a general curiosity of the question most people no longer wondered about: why did the police respond as they did? (Many times I have received comments like: Why do you want to study that? Was not that answered by the 22 July Commission?).

This general curiosity prompted an empirical investigation that ranged from careful examination of the police response in detail through detailed logs

and transcriptions of telephone and radio communication to archive studies of policy documents, field observations and numerous interviews with police leaders, officers and others. What I found was an interesting story about how crisis coordination is significantly conditioned by pre-existing structures and practices and the timing of actions and couplings as the crisis response proceed. Moreover, it gradually also became clear how many of the post-crisis assessments of the police response had a hindsight bias, it was based on information those involved did not have at the time they made their actions and/or capacities they did not have available. That being said, mistakes were made, and the police could have responded swifter. Still, I have focused on finding out why they responded as they did and not differently, rather than talking about right and wrong decisions. The story both challenge and nuance existing accounts on why the police responded as they did. My hope is therefore that this dissertation can contribute to a more nuanced and elaborate understanding of 22/7; and, more broadly, our understanding of how and why crisis coordination happens as it does during crisis responses.

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1 Introduction

1.1 Introduction

On 22 July 2011, Norway experienced two terrorist attacks within the brief time-span of just three hours (hereafter "22/7"). First, at 15:25 a bomb exploded in the government complex in Oslo, where the Prime Minister' office, the Ministry of Justice and most of the other Norwegian ministries are located. Several buildings were destroyed. The political power center of Norway was subjected to a deadly attack. Eight people were killed and more than 30 were physically injured. The relatively low number of casualties, considering the magnitude of the explosion, stems from the fact that most of the employees had gone home by the time the bomb exploded.

Two hours later, a shooting massacre unfolded at the island of Utøya (40 kilometres north-west of Oslo) where members of the Labor Party's youth movement were attending its annual summer camp. A total of 69 people were shot and killed and 66 more were physically injured. The attacks were carried out by one single person, the right-wing extremist Anders Behring Breivik, an ethnic Norwegian. Terrorist attacks of this magnitude were unprecedented in Norway in the postwar period. The attacks were also among the deadliest in the Western world in the twenty-first century.

In the months that followed 22/7, the police response to the two terrorist attacks was subject to extensive criticism in the mainstream and social media and in the public more generally (e.g. Johansen & Foss, 2011; Kolsrud, 2011; Skartveit, 2011). Numerous media articles described what seemed, in the eyes of most readers, like a flawed police response, which can be illustrated with a few examples. For instance, only minutes after the bomb explosion in Oslo, the Oslo police district (Oslo police) received detailed information about an armed person in uniform observed leaving the government complex only minutes prior to the explosion. The information even included the license plate of the car he drove away in (hereafter the "car-tip"). Still, almost one hour passed before any measures to follow up this information were taken. When it eventually was, the measures were piecemeal and ineffective: the terrorist was not hindered from driving to Utøya.

Furthermore, the Oslo police turned down offers of assistance, and several of the police districts in vicinity of Oslo, including the Nordre Buskerud police, did not take any initiative to mobilize their own capacities upon the bomb explosion. Two other examples are the lack of air transport capacities available to the police and the efforts to coordinate the mobilization of capacities by police organizations at the national level. The police helicopter service was not operative, because all the pilots were on holiday. However, off duty pilots called in and reported that they were available if needed. Still, hours passed before the police helicopter service was mobilized. Regarding the efforts to coordinate the mobilization from the national level, the national anti-terrorism procedures were never enacted. The procedures list relevant measures that can be implemented in the event of a terrorist attack such as relevant capacities to mobilize and the closing of international borders. In 2010 the police implemented a new email-based alarm system for a swift and secure way to alert other police districts. On 22/7, three emails were sent via the alarm system to all 27 police districts within the first three hours after the bomb explosion. All three emails contained information of utmost importance at the time. For instance, information about a possible getaway car and, upon the arrest of one perpetrator at Utøya, information that, according to the arrested perpetrator, there were two more cells in Norway, which had yet to strike. Only six of the 27 police districts registered any of the three emails during the evening of 22/7.

A final set of examples, while civilians and camping tourists in proximity to Utøya organized a spontaneous rescue operation, the first unit from the local police district (Nordre Buskerud police district) to arrive Utøya pier at the main landside remained on the mainland and did seemingly nothing. Three police districts and the national anti-terrorism police (hereafter Delta) were almost simultaneously alerted that there was on-going shooting at Utøya and mobilized capacities to prepare for a police operation on Utøya. However, the three police districts did not know, at the time they were alerted, if other police districts had been alerted. Approximately thirty minutes passed before the Nordre Buskerud police and Delta were able to establish direct contact and when they did the meeting point for the arriving police was changed and set 3,2 kilometres further

away from the Utøya island. The third police district directed its police units to the local police station instead of directly to Utøya, even though they knew it was a detour and even though they had communicated with the local police. Moreover, the Nordre Buskerud police made no successful efforts to retrieve additional boats during the first 35 minutes of the operation, in addition to the one boat they had at their disposal. This despite the fact that they knew the shooting incident was happening on an island and that there were many youths on the island. The lack of additional boats turned detrimental as Delta and the Nordre Buskerud police overloaded the boat causing it to halt. When a civilian boat came to the rescue only some seconds later, the same mistake was repeated. All but one police officer boarded the civilian boat, which was evidently too heavy a load for the boat as it proceeded slowly towards the island. Only when a second civilian boat came to the rescue and they could reorganize the police personnel between the two civilian boats were they able to gain high speed and head towards the island.

Observations like these led to a virtual unanimous assessment of the police operation as a failure in the public opinion (Christensen & Lægreid, 2014; Johannessen, 2015; Renå, 2017): the police could have responded more swiftly, the terrorist could have been stopped earlier and consequently, more lives could have been saved. The narrative of a flawed police response was reinforced and radically intensified when the independent crisis inquiry commission (hereafter the 22 July Commission) – appointed by the government to investigate the attacks – released its report one year after 22/7.[1] The 22 July Commission concluded that "The government's ability to protect the people at Utøya failed. A swifter response by the police was in fact possible. The perpetrator could have been stopped earlier on 22/7" (NOU, 2012, p. 15).

[1] A simple illustration, in August, 2011, there were at least 143 newspaper articles that included the words 'police', 'criticism' and '22 July'. In August 2012, when the 22 July Commission was released the number was 669. The numbers are based on an online search on *Atekst* (*Atekst* is an online archive, which includes most printed articles from Norwegian newspapers), conducted 1 October 2018.

This thesis challenges the widely shared view of a failed police response. Many of the decisions and actions that were taken by the police certainly seem unreasonable and contradictory *in hindsight.* However, a main argument of this thesis is that what may seem like unreasonable actions and flawed crisis coordination at the aggregate level stem from actions that were reasonable for the individuals at the time they enacted their actions given their preconceptions of the roles they had in the organization, their designated role in the actual operation, their physical location and the information they had at that point in time.

As the argument challenges existing views of the police response, this begs the question of why the explanation presented in this thesis is significantly different from the existing accounts on the police response and coordination on 22/7, considering several in depth evaluations have been conducted. Most notably, the 22 July Commission, which was widely praised both by the media, politicians and governmental bodies for a thorough and well-founded analysis (Holst & Krick, 2018; Høyer, Madsbu, & Tranøy, 2018). I argue the reason is related to differences in theoretical and methodological approach. More specifically, I argue it is related to whether, and how, we account for the fact that time is characterized by an interplay between chronological time, i.e. time as present, happening now, and kairotic time, i.e. time as past, which is the result of social construction where periods of time are omitted while others are deemed central and important. In contrast to existing accounts, *time* is the locus for the analysis in this thesis. I employ what I call a prospective research strategy, I take the respective actors' bounded overviews as analytical starting points and focus on what was practically feasible, rather than theoretically possible in my counterfactual analysis. This argument is more of an underlying meta-argument, which I explain in the theory and method sections and return to in the overall analysis.

1.2 Research questions

This thesis aims to examine and explain central aspects of the police crisis coordination, which, it is reasonable to believe, played a significant role in determining the outcome of the overall police response. That being said, my focus is on crisis coordination as process, not outcome. Even though the political center of Norway had been subjected to a lethal attack in the power center of the capital, followed by a shooting massacre, the police were reactive in their mobilization of capacities.

This brings me to research question (RQ) I: *Why did not the police mobilize more capacities more swiftly?* More specifically: to what extent was the reactive and insufficient police mobilization caused by pre-existing organizational structures and practices?

As the examples in the introduction illustrated, the police struggled to coordinate its mobilization, its information sharing and operations. For instance, when the operators at the Operations Center in Oslo made efforts to forward the car-tip to other police districts, the car-tip transformed into four different streams of information. Moreover, only two of the four recipients of the respective information streams took specific measures to try and detect the car. Another example: during the first thirty minutes of police operation Utøya, Operations Commanders and operators at the Operation Centers in the police districts involved in the operation communicated with one another on five occasions. On every occasion, one (or both) of them was left with more questions than answers.

This brings me to Research Question (RQ) II: *Why was there a lack of coordination by the police in its response to the two terrorist attacks?* Was it primarily due to limitations in the pre-existing structures and practices or the actions that emerged as the crisis response unfolded?

There is a broad theoretical universe of possible perspectives and explanations that can be taken as points of departure to examine and answer the two research questions. These sets of possible perspectives and explanations are related to which analytical levels of explanation are of primary interest. For studies of crisis coordination, macro-level oriented explanations could for instance focus

on the role of ideas and institutions;[2] meso-level oriented explanations typically focusing on organizational characteristics and group dynamics could for instance examine the role of standard operating procedures and routines (Gersick & Hackman, 1990; Okhuysen, 2005), crisis communication (Bharosa, Lee, & Janssen, 2010; Reddy et al., 2009; Sellnow & Seeger, 2013) or so-called groupthink (Janis, 1972, 1982); micro-oriented level explanations could for example focus on how actions were conditioned by cognitive biases (Nickerson, 1998; Tversky & Kahneman, 1973) or how psychological mechanisms affect creativity (Klijn & Tomic, 2010).

Theoretically this thesis takes a primary interest in how human action, interaction and information sharing within and across "established" first responder organizations (Dynes, 1970) are enabled and constrained by two sets of characteristics. First, I examine the role of characteristics of the organization in which they operate, hence the reference to pre-existing organizational structures and practices in the two RQs. Second, I examine the role of characteristics of the crisis setting, which sometimes disrupt pre-existing structures, practices and channels for information sharing and consequently trigger a need for improvised actions and interactions, hence the reference to emergent actions in the unfolding crisis response in RQ II.

Coordination is defined as "the adjustment of actions and decisions among interdependent actors to achieve specified goals" (Koop & Lodge, 2014, p. 1313). A crisis response is coordinated when those coupled with the crisis exhibit the appropriate attributes to handle the problem (hereafter problem-fit), they have a high level of shared situational awareness (Weick, 1993) and there is a clear division of work with limited overlap (Boin, Brown, & Richardson, 2019, Chapter 4; Drabek, 2007) and no underlap, i.e. the crisis incident does not create problems which fall between existing jurisdictional boundaries and thus make it unclear whose responsibility they are (cf. Wegrich & Stimac, 2014, p. 45).

[2] In this thesis, institutions are defined as 'humanly devised constraints that structure political, economic and social interactions. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights) (North, 1991, p. 97).

To avoid conceptual confusion regarding the notion of coordination, it is important to distinguish between coordination as it is defined in this thesis and directive actions to bring about that coordination (Boin & Bynander, 2015; Koop & Lodge, 2014). The latter refers in this thesis to enacting directive action to mobilize and dispatch capacities to handle a problem that requires immediate response. The analytical distinction between directive action to enable crisis coordination and actual crisis coordination is reflected in the two research questions, where the first focuses on the directive actions while the second is focused on crisis coordination.

To examine and answer the two research questions empirically this thesis draws on a unique and rich selection of data sources. The data sources are unique because they provide data that document the sequence of events in *real time*, such as transcripts of all the radio and phone communication in the Oslo and Nordre Buskerud police, transcripts of the police operative logs from the police districts in the vicinity of Oslo and Utøya and the minutes from the first meetings in the Crisis Command Group in the Oslo police. More generally, I have been granted access to the extensive data material that the police collected in their own evaluation of 22/7. I have also collected additional data via interviews, document studies and field observations.

1.3 Perspectives on coordination

The broader theoretical question of this thesis is related to crisis coordination: how to understand and explain how and why crisis coordination happens during crisis responses, cf. the emphasis on crisis coordination as process. The quest for coordination has been a central theme for decades in crisis and disaster research (e.g. Drabek, 2007; Dynes, 1970; Dynes & Aguirre, 1976), and research on organizational behavior, decision- and policy-making (Chisholm, 1989; Christensen, Lægreid, & Rykkja, 2015; Gulick, 1937; Okhuysen & Bechky, 2009; Pollitt & Bouckaert, 2011; Thompson, 1967). The aforementioned literatures offer a series of explanations to the question of coordinating interdependent actions in organizations.

The argument of this thesis builds on three conventional perspectives on coordination: coordination by design (e.g. Gersick & Hackman, 1990; March & Simon, 1993; Mintzberg, 1989), coordination as evolutionary practice (Weick, 1979, 1995) and coordination as emergence (e.g. Faraj & Xiao, 2006; Majchrzak, Jarvenpaa, & Hollingshead, 2007; Wolbers, Boersma, & Groenewegen, 2018). The *design perspective* takes a primary interest in the formal structures of organizing, arguing that the purposive elements of formal organizing like plans, programs, rules and standard operating procedures induce predictability and common understanding within the organization on who does what, when and how (Allison, 1969; Gersick & Hackman, 1990; Okhuysen & Bechky, 2009). Even if the purposive elements of formal organizing may work well in ordered settings, what about disordered settings like crisis settings? Many crisis and disaster scholars have argued that coordination by design is of little help in crisis settings due to the unexpectedness and disruptiveness of such events (e.g. Clarke, 1999; Dynes, 1970; Tierney, 2014; Turner, 1978).

The *evolutionary practice perspective* take a primary interest in the role of past practices and how they are related to human cognition (Weick, 1979, see also 1995). Building on cognitive psychology research, Weick argues that humans develop cognitive cause maps and through repeated practices we select those cause maps that have worked well in the past. Over time these cause maps manifest themselves as preconceptions and work as heuristics when we coordinate our actions. The evolutionary practice perspective elucidates why crisis settings are challenging for human cognition and how relevant practice, for example crisis exercises and training, can help reduce this challenge. However, the perspective is of little help when it comes to those situations where humans have few or little experiences and they do not have any relevant cause maps to draw on, which is not unusual in the event of a crisis, which by definition is a low-probability, high-consequence event.

In contrast to the two aforementioned perspectives, which mainly focus on characteristics prior to the actual coordination, the *emergence perspective* takes a primary interest in the actual coordination. Scholars adhering to the emergence perspective have observed that in crisis settings there is

organizational behavior that deviates from the pre-existing structures and practices, also in established first responder organizations. Proponents of the emergence perspective therefore emphasize the importance of flexible role structures ("role-shifting" Bechky & Okhuysen, 2011; "delegating tasks" Wolbers et al., 2018) and deviation from extant plans and procedures ("protocol breaking" Faraj & Xiao, 2006; "working around procedures" Wolbers et al., 2018). But the fact that established first responder organizations sometimes adapt their structures and deviate from extant procedures does not necessarily imply that all plans are obsolete. Put rhetorically, how would two collaborating organizational units at different locations and who trust each other establish contact, achieve a shared situational awareness and a coordinated response if they were both shifting roles and breaking extant procedures?

1.4 The argument in brief

I employ a synthesizing research strategy, i.e. I do not see the three perspectives as separate, but as parts of a totality (Roness, 2009). Drawing on the literature on improvisation in organizations (Frykmer, Uhr, & Tehler, 2018; Hatch, 1999; Pina e Cunha, Vieira da Cunha, & Kamoche, 1999; Wachtendorf, 2004) I assert that crisis coordination is not induced solely by either organizational design, evolutionary practices or improvised actions that emerge upon the occurrence of a crisis incident. By contrast, I argue crisis coordination, regardless of being routinized or emergent improvisations, is both constrained and facilitated by pre-existing structures (cf. “design”) and practices (cf. “evolutionary practices”).

The argument of this thesis differs from existing accounts on the police crisis coordination on 22/7 by emphasizing among other things that the crisis coordination on 22/7 was significantly hampered by the organizational structure of the police. I argue the Norwegian police in the 2000s was characterized by a decentralized silo structure: building crisis preparedness capacities and actual crisis coordination happened primarily within the respective police districts (silos), rather than across police districts and between the national and local level. Coordination between the silos was one of the major challenges on 22/7.

In contrast, the 22 July Commission concluded that "the structural organizational challenges are less important (…). We have seen few examples that formal organizing has been a limiting factor. We have seen many examples that the leadership has not exploited the potential in its organization" (NOU, 2012, p. 456).

Answering the "why"-question of crisis coordination is not only a matter of examining the "what" and the "how", we also need to examine and take into account the "when". Theoretically, the argument of this thesis differs from conventional accounts on coordination by taking into account the multidimensional role of timing in crisis coordination. The argument is twofold. First, the main reason why the police were not more proactive in their mobilization, and why their response was not more coordinated, is the timing of (directive) actions and couplings: *when* the directive actions and actions during the crisis coordination were taken; *when* information got coupled to police personnel; and, *when* police capacities got coupled with the problem(s) they were expected to handle. For instance, an important reason why Delta did not make use of a helicopter in police operation Utøya is the timing of when those in command mobilized relevant air transport capacities. An important explanation why the Nordre Buskerud police did not mobilize more boats earlier is that in the initial phase of the police operation they did not know that Delta was on its way, that their own police boat would halt, or that there was a camping site in the immediate vicinity of Utøya with many boats available. Thus, they based their actions on the information they had at that point in time.

Second, the possibilities for enacting swift mobilization, and a coordinated police response, were significantly constrained by pre-existing crisis coordination structures and practices: for instance, the decentralized silo structure of the police and the detailed political steering by the Ministry of Justice, which was biased towards other policy issues than crisis preparedness. Thus, in addition to the what, the how and the when, we also need to examine the historical development of the organizations involved and the institutional environment they operated in. The coordination capacity of first responder organizations is shaped by the past. For instance, to what extent they have trained

and exercised crisis coordination, and to what extent their superior political bodies have prioritized crisis preparedness in their political steering of the organizations.

In other words, for a more comprehensive understanding of crisis coordination we need to take into account the multidimensional role of time in crisis coordination in our theoretical and analytical frameworks: time as timing (Cohen, March, & Olsen, 1972; Kingdon, 1984), urgency (Hermann, 1963; Rosenthal, Charles, & 't Hart, 1989), and history (Pierson, 2004; Pollitt, 2008; Vaughan, 1998); the sequential logic of crisis (when there is more than one incident); and, how the interplay between chronological time (also called objective time) which is measured in mechanical intervals, and kairotic time (also called subjective time) which is socially constructed (Czarniawska, 2004; Fleischer, 2013; Hernes, 2008), can induce hindsight biases in analysis of crisis coordination.

I develop a multiple streams framework to take into account the multidimensional role of time in crisis coordination. Crisis coordination is not perceived solely as a sequential, linear process, but as a process that comprises several streams that interact on many different locations simultaneously. I draw inspiration from the ideas of the garbage can model (Cohen et al., 1972; March & Olsen, 1976) and the policy streams framework (Kingdon, 1984) and apply them on the field of crisis management.

More specifically, I conceptualize crisis coordination as being conditioned by the interaction of three streams: capacities, problems and information (about problems and capacities). I focus on two types of interactions. The first is the interaction between streams of capacities and streams of problems, more specifically the process of coupling capacities to the problems that need to be handled. I theorize when, where, how and why capacities are likely to be coupled with problems, what I call problem-couplings.

The second type of interaction I focus on is the interaction between streams of information and streams of capacities, which refers to the information-sharing of the crisis coordination. I theorize when, where, how and why information is likely to be coupled with capacities, what I call information-couplings, during a

crisis response. Furthermore, I theorize how people involved in crisis coordination try to enact and maintain a shared situational awareness, and potential barriers related to this.

Furthermore, problem-coupling is one of two necessary conditions that have to be fulfilled before crisis coordination can take place: i) Someone has to become aware that there has been a crisis incident, i.e. information-coupling. It is impossible to respond to an incident whose existence you are unaware of. ii) Someone has to respond by taking directive action to bring about problem-coupling, i.e. to mobilize and dispatch relevant capacities to handle the incident. Given the focus on time as timing, I also theorize when, how and why crisis coordination is likely to happen in the first place. People can have two functions in my framework, they can be capacities and they can be actors. As actors, people can send and receive information and they take actions.

The underlying idea of the framework is that when problems occur, capacities are needed to handle the problems. But to become aware of the problem and the need to mobilize capacities, the responders (people as actors) are dependent on getting information about the problem (information-coupling). Moreover, the responders (as actors) dispatched to handle the problem are dependent on information and capacities to locate each other, coordinate and find out how to handle the problem.

To summarize, I argue that whether and when the two necessary conditions – awareness that a crisis incident has occurred, and directive action to bring about crisis coordination in response to the crisis incident – are likely to be fulfilled, and the subsequent interaction of the three streams, is conditioned by a combination of factors. The factors are pre-existing crisis coordination structures and practices, the routinized and improvised actions that emerge in response to the crisis, as well as temporal and material characteristics of the particular crisis setting.

1.5 Motivations and case selection

As already pointed out, the two terrorist attacks in Norway on 22 July 2011, were unprecedented by Norwegian standards and among the deadliest terrorist attacks

in the Western world in the twenty-first century. The incident was extensively covered in both the domestic and international media. Furthermore, the police response was subject to extensive criticism and has, to my knowledge, not yet been subject to research-based analysis. With this in mind, I assert that 22/7 would qualify as "a talking pig", i.e. a case study that derives its excitement and justification first and foremost from the description of a particular phenomenon (Siggelkow, 2007, p. 20).

However, the ambitions of this thesis go beyond providing a rich descriptive account of how the police responded. The case of the police response to 22/7 also offers a unique opportunity for rigorous analysis of what actually happens during crisis responses because of the rich and varied empirical material that has been collected. This includes data sources that document the sequence of events as they happened in real time, which enables a closer examination than studies that primarily are restricted to post-crisis material, e.g. interviews, surveys, media articles, evaluation reports and so forth, which many studies of crisis and disasters are based on.[3]

Another relevant point is that 22/7 was what I call a *sequential* crisis, i.e. two (or more) crisis incidents occurring within a short time-span. The occurrence of a second crisis incident affected the temporal order of the coordination of the crisis response, and the attention and priorities of the police organization. Hence, sequential crises provide opportunities for richer accounts of the temporal dynamics in crisis coordination compared with single crises.

I use the evidence from my empirical analysis inductively to develop a theoretical argument that can help explain the patterns and dynamics I observe in my empirical material. For a more nuanced and exhaustive understanding of police crisis coordination on 22/7 than extant accounts have provided I argue we need to take into account the multidimensional role of time. Furthermore, I contend that the extant crisis management literature has given too little attention

[3] For instance, in a recent review of 80 empirical studies of multi-agency disaster responses it was found that only four of the 80 studies used primary data and eleven were based on field observations (Steigenberger, 2016).

to how the multidimensional role of time affects how crisis coordination actually happens.

I conceptualize 22/7 as a case of a predatory crisis, which can be defined as incidents caused by human action on behalf of a non-state actor with the intention to harm civilians and causing a regional or national security threat. Predatory crisis is used as an analytical category to enable more contextualized and nuanced discussions of the prospects of applying the implications of my theoretical argument on similar cases.

1.6 Routine emergencies, crises and black swans

It may sound like a contradiction talking about incidents that are experienced as crises for police officers and other first responders and emergency professionals, because they confront what other people would call crises repeatedly in their everyday work. However, some incidents are experienced as crises even for them. I distinguish analytically between routine emergencies and crises and perceive black swans as a special case of the latter.

Three characteristics are prevalent in definitions of "crisis" in the crisis management literature: threat, urgency and uncertainty (Boin, Stern, 't Hart, & Sundelius, 2016; Hermann, 1963; Rosenthal et al., 1989). One oft-cited definition is the one by Rosenthal et al. (1989): crises occur when members of a social system sense that core values or life-sustaining features of a system have come under threat, which requires urgent remedial action under conditions of deep uncertainty (Boin et al., 2016, p. 5; Rosenthal et al., 1989, p. 10). Thus, being put in a crisis situation is entrenched with uncertainty and a need for swift action. There is deep uncertainty with regard to causes, consequences and intervention options (Ansell, Boin, & Keller, 2010, p. 197).

It is important to note that both threat and urgency have a subjective component. Whether a situation is experienced as threatening or not, and to what extent there is a matter of urgency hinges on individual perception. What is likely to be perceived as a crisis by many civilians is not necessarily perceived as a crisis by professional first responders, for them it is often a "routine emergency"

(Altay & Green, 2006; Wart & Kapucu, 2011). That being said, extraordinary incidents like large-scale terrorist attacks such as "9/11" or "London bombings" are arguably experienced as a crisis for the first responders involved because of their magnitude and disruptiveness. Large-scale terrorist attacks trigger a disordered setting where the uncertainty is pervasive and the organizational structures of the first responder organizations are put under pressure (Snowden & Boone, 2007; Weick, 1993).

Whether an incident is best described as a routine emergency or a crisis for the first responders is assessed by asking the following two questions: whether the incident is recognizable for the first responders, and whether the incident unfolds in a recognizable process (cf. Cunha, Clegg, & Kamoche, 2006). In other words, whether they are able to swiftly recognize and make sense of what is going on, or the incident comes as a surprise and forces them to a fundamental re-analysis of their assumptions and learned responses.

Popularized definitions of extreme versions of the latter are so-called "black swans" and "unknown unknowns" (Taleb, 2010; Žižek, 2014). These are characterized by being outliers, "as [they] lie outside the realm of regular expectations, because nothing in the past can convincingly point to [their] possibility". Furthermore, black swans carry an extreme impact and we, as human beings, "concoct explanations for [their] occurrence after the fact, making [them] explainable and predictable" (Taleb, 2010, p. 3). Such events have also been conceptualized in temporal terms as "quantic time" which "refers to the occurrence of irreversible breaks in the linear timeline (…) [and that such events have] long-term effects on the basic premises of organizational behavior by ushering in a new era" (Fleischer, 2013, p. 318)

Was the bomb explosion in the government complex recognizable for the police personnel, and did the subsequent events unfold in a recognizable process? I would assert the answer is no to both questions. It could be argued that the answer is yes to the first question with reference to the fact that a bomb explosion scenario akin to the one on 22/7 was one of the scenarios included in a classified security project for the government complex (NOU, 2012). One counter-argument is that due to its secrecy, there were only a few people in the

police that knew about the project (Lægreid, Christensen, & Rykkja, 2016). Practicing threat scenarios of this magnitude, and exercises more generally, was rarely done in the police in the years preceding 22/7. A bomb explosion in the government complex followed by a shooting massacre on an island was far from the imagination of most Norwegians, including the police. Thus, the subsequent events upon the bomb explosion unfolded in a way no one had anticipated. By Norwegian standards, 22/7 was a black swan.

1.7 Preview of the empirical analysis

The empirical analysis is divided into two main parts. The analysis in each chapter is guided by chapter-specific research questions, which at the same time yield parts of the answers to RQ I and II. The first part consists of two chapters (4 and 5) and focuses on the years prior to 22/7.

In chapter 4, I examine *How the police's crisis preparedness and coordination capacities were designed and practiced prior to 22/7*. I argue that the crisis preparedness and coordination capacities in the Norwegian police in the 2000s were characterized by a decentralized silo structure. Crisis preparedness capacities at the national level were limited, and none were designed to take a coordinating role in the event of a crisis. The police districts were expected to handle all incidents within their own jurisdictions and horizontal crisis coordination was rare and characterized by a one-to-one interaction between the police districts.

The point of departure for chapter 5 is the fact that only six of the 27 police districts registered any of the three emails that were sent via the police alarm system on 22/7. I examine: *Why did the police's internal alarm system not work on 22/7?* I demonstrate that the alarm system did not fail primarily due to operative or technical errors, but because of a flawed implementation process, which can be further linked to characteristics of how the police organization was designed and the institutional and technical environment it operated in.

The second main part of the empirical analysis consists of four chapters (6–9) and focus on the directive actions and actual crisis coordination by the

police on 22/7. Chapter 6 takes the explosion in Oslo as point of departure and examine: *Why was there a proactive mobilization of own police personnel? Why was there a reactive mobilization of air transport capacities and external police capacities?* I argue that the proactive mobilizing of own police personnel by the Oslo police was a result of self-organization and the fact that the incident happened just after the day shift had ended. The reactive mobilization was due to a number of reasons including political de-prioritizing of the air transport capacities in the years prior to 22/7 and the fact that the Crisis Command Group (CCG) in the Oslo police was under the impression that POD would coordinate the mobilization of external capacities.

In chapter 7, I zoom in on one particular aspect of the initial response by the Oslo police: its handling of the already mentioned reported observations of an armed person in uniform at the government complex just before the explosion. I examine: *Why did important details get lost (or transformed) as the information was shared throughout the police organization? Why did the Oslo police not implement any measures to try and detect the car? More generally, why did the police not respond more proactively to the detailed descriptions they received about an armed man in uniform and the car he was driving observed leaving the government complex only minutes before the bomb explosion?* Among the central explanations are limitations in the communication technology, which "forced" the police personnel to share the information orally and by handwritten notes.

In chapter 8, I shift analytical focus from the Oslo police to the national police directorate, POD, and the police districts in vicinity of Oslo. POD enacted few directive actions upon the bomb explosion, while the response of the police districts was mixed. I examine: *Why did POD not take a more proactive role in coordinating the mobilization of police capacities upon the bomb explosion? Why was the response by the police districts in proximity of Oslo mixed?* I argue that POD was not designed, exercised or staffed to take a proactive coordinating role on 22/7, and that across the police districts, there existed various preconceptions on when it was time to mobilize and what capacities to mobilize.

In chapter 9 I examine a series of questions all related to the issue of mobilizing police capacities to Utøya: *Why did some of the adjacent police districts await the situation and why did Søndre Buskerud police dispatch its units to the local police station instead of Utøya? Why was the meeting point for arriving police units changed? Why was not the Nordre Buskerud police more proactive in mobilizing more boats? Why was helicopter transport unavailable for Delta, and why did not the first police unit that arrived do more than observe towards the island?* I argue that all the directive actions I examine can be conceptualized as routinized actions even though they differ in how proactive they were. This is related among other things to what role the respective actors had and the timing of information-couplings. Furthermore, the main coordination challenges were related to inter-organizational coordination (rather than intra-organizational).

1.8 The structure and internal logic of the thesis

The two main parts of the empirical analysis comprise two and four empirical chapters respectively. The four empirical chapters that comprise the second part of the empirical analysis are closely related. They overlap partly in time and what the primary units of analysis are. In sum, I believe the six empirical chapters – chapters 4 to 9 – yield important, though not exhaustive, explanations of why the police responded as they did. Table 1.1 provides a simple overview of what time periods the empirical chapters cover.

Table 1.1: Overview of the time periods covered in the empirical chapters.

Chapter	Pre-crisis	In-crisis coordination	
		First attack	Second attack
Chapter 4	X		
Chapter 5	X		
Chapter 6		X	
Chapter 7		X	(X)*
Chapter 8		X	(X)*
Chapter 9			X

* The brackets signal that the second attack is not a central focus of the analysis in the chapter, although the time period of the analysis goes beyond the point of time when the second attack occurred.

I distinguish analytically between intra-organizational (within one police district or one national police agency) and inter-organizational coordination (between police districts or between national police agencies), and between horizontal and vertical coordination (elaborated in next chapter). This provides four types of crisis coordination. All four types are examined in the thesis, but it varies between the different empirical chapters which types are examined, as illustrated in table 1.2.

Table 1.2: Chapter analysis of types of crisis coordination.

Chapter	Intra-organizational (horizontal and vertical)	Inter-organizational (horizontal)	Inter-organizational (vertical)
Chapter 4	X	X	X
Chapter 5		X	X
Chapter 6	X		
Chapter 7	X	X	X
Chapter 8	X	X	X
Chapter 9	X	X	

The remainder of this thesis is structured in ten chapters. In chapter 2, I outline my theoretical framework. The research design and research methods are outlined in chapter 3. Chapters 4 to 9 comprise the empirical analysis. In chapter 10 I make an overall analysis of the empirical chapters, before I conclude and outline some possible implications in chapter 11.

2 Crisis Coordination: A Theoretical Approach

2.1 Introduction

The theoretical focus of this thesis is understanding and explaining how and why crisis coordination happens as it does during crisis responses. The overall argument is that in order to fully grasp crisis coordination in actual crisis responses, such as the Norwegian police's response to 22/7, we need to apply theoretical frameworks that integrate the multidimensional role of time in crisis coordination. Thus, answering the "why"-question of crisis coordination is not only a matter of examining and taking into account the "what" and the "how", we also need to include the "when".

In this chapter I first clarify what I mean by coordination and make relevant analytical distinctions and clarifications (2.2), before I outline and discuss three theoretical perspectives on coordination: coordination by design, coordination as evolutionary practices and coordination as emergence (2.3). I conceptualize the three perspectives as parts of a totality in which the multidimensional role of time should be included. In 2.4, I briefly outline five dimensions of time: time as history, timing, urgency, sequential logic and the interplay between chronological time and kairotic time, which I argue are relevant for the study of crisis coordination. I also review how the crisis management literature deals with the notion of time in relation to crisis coordination. I make a distinction between pre-crisis coordination and in-crisis coordination. The former is an important precursor for the latter. How in-crisis coordination will be exerted is conditioned by pre-crisis coordination, i.e. pre-existing structures and practices (cf. time as history), which is the focus of 2.5. In the final sub-chapter, I sketch a multiple streams framework on in-crisis coordination (2.6). The framework is an attempt to operationalize the role of time as timing, urgency and sequential logic in crisis coordination. How the interplay between chronological time and kairotic time affects crisis coordination is more of a meta-argument presented in this chapter, and returned to in chapter 3. I end the chapter by deriving a series of expectations (2.7).

2.2 Coordination

I make an analytical distinction between intra- and inter-organizational coordination, coordination within and between organizations respectively. In the empirical setting this thesis focus on, intra-organizational coordination refers to the coordination among individuals and organizational units in the respective police districts and police agencies. Inter-organizational coordination refers to coordination between police districts and agencies, and can also involve third parties like for example other emergency agencies.

Furthermore, I make an analytical distinction between vertical and horizontal coordination (Christensen & Lægreid, 2008). The former refers to two or more parties on different hierarchical levels coordinating their actions to achieve specified goals, which must be separated from directive actions taken by someone in superior command to enable coordination among subordinates. Vertical coordination is typically associated with concepts like hierarchy, command and control. In contrast to vertical coordination, horizontal coordination refers to actions among two or more parties on the same hierarchical level: for example, the operation centers in two police districts coordinating their actions in a joint police operation. Horizontal coordination is thus typically more network-oriented than vertical coordination, no one is superior to the others involved.

2.3 Three perspectives on coordination

The quest for coordination has been a central theme for decades in crisis and disaster research (e.g. Drabek, 2007; Dynes, 1970; Dynes & Aguirre, 1976), and research on organizational behavior, decision- and policy making in organizations (e.g. Christensen & Lægreid, 2007; Christensen et al., 2015; Gulick, 1937; Okhuysen & Bechky, 2009; Pollitt & Bouckaert, 2011; Thompson, 1967). While the latter has been primarily occupied with coordination in ordered settings, I would argue much of the crisis and disaster literatures have primarily been occupied with how coordination of crisis

responses is affected by the characteristics of the crisis setting, how the magnitude of the incident typically disrupts existing structures.

The aforementioned literatures offer a series of explanations to the question of coordinating interdependent actions in organizations. In this sub-chapter I review three types of conventional accounts on coordination, which emphasize respectively i) organizational design, ii) evolutionary practices and iii) emergent actions as determinants of coordinated organizational behavior. In the final section of the sub-chapter I explain how I perceive the relation between the three perspectives, which forms the ground for my theorization of how in-crisis coordination is conditioned by pre-crisis coordination and factors in the specific crisis setting, which are the foci of 2.5 and 2.6.

2.3.1 Coordination by design

Scholars adhering to a coordination by design perspective focus on the formal structures of organizing. A basic tenet of the design perspective is that the purposive elements of formal organizing like plans, programs, rules and standard operating procedures are the primary means by which organizations accomplish much of what they do (e.g. March & Simon, 1993; Mintzberg, 1989). They induce predictability and common understanding within the organization on who does what, when and how (Allison, 1969; Gersick & Hackman, 1990; Okhuysen & Bechky, 2009). Vertical coordination is ensured through unity of command, centralization and subordination of interests (Fayol 1949 cited in Okhuysen & Bechky, 2009, p. 467), while the design of horizontal coordination is contingent on inter alia what specialization principles the division of work is based on (Gulick, 1937), and what contingencies the organization faces in its environment (Thompson, 1967). The basic ideas of the design perspective are echoed in ideal types like the "Weberian bureaucracy" (Weber, 1978) and hierarchical organizations based on command and control.

The purposive elements of formal organizing may work well in ordered settings, but what about disordered settings like crisis settings? Many crisis and disaster scholars argue that coordination by design is of little help in crisis settings. One line of critique points to the *unexpectedness* of such events. Because human beings and organizations often fail to understand and explain the

events preceding and surrounding crises and disasters (Turner, 1978), the emphasis on design to enable coordinated response in such settings has little relevance. A prominent exponent for this critique, is Lee Clarke (1999), who argues that plans are "fantasy documents". Clarke's point is that plans for unimaginable events have no chance to succeed. Yet, these documents often serve as symbols of control and order, and can inspire a false sense of confidence in the organizations.

Another line of critique relates to the *disruptiveness* of crisis and disaster events, prominent inter alia in the disaster sociology literature (Dynes, 1970; Quarantelli, 1988; Rodriguez, Quarantelli, & Dynes, 2007; Tierney, 2014). Disaster sociologists criticize what they perceive as the dominant model in crisis and contingency planning, the idea that crises and disasters are characterized by chaos, and that "the chaos can only be eliminated by COMMAND and CONTROL" (Dynes, 1990, p. 2, capitals in original). Another line of research has observed that the magnitude and impact of crisis and disasters disrupts existing structures resulting in emergent response groups, which play a decisive role for the outcome of crisis and disaster responses (Drabek & McEntire, 2002, 2003; Stallings & Quarantelli, 1985).

2.3.2 Coordination as evolutionary practices

The emphasis on practice as an important precursor for coordination is echoed in several fields of literatures. A prominent example is practice theory (Feldman & Orlikowski, 2011; Geiger, 2009; Nicolini, 2012), which in the case of coordination, focuses on the "ongoing work that emerges in response to coordination challenges" (Okhuysen & Bechky, 2009, p. 468). According to this perspective, actual coordination is perceived as a result of how the purposive formal structures have been practiced before in similar settings. The structures are created, maintained and changed through repeated actions and interactions (Feldman & Pentland, 2003; Lawrence, Suddaby, & Leca, 2012).

This shifts the focus from organizations and structures to a process perspective on organizations (Hernes & Maitlis, 2010). It is about actions of organiz*ing*, "to organize is to assemble on-going interdependent actions into sensible sequences that generate sensible outcomes" (Weick, 1979, p. 3). A

prominent exponent of the process perspective on organizations is Weick (1979, 1995), which conceptualizes organizing as consisting of four elements: ecological change, enactment, selection and retention (Weick, 1979, pp. 130–145). His conceptualization resonates with the notion of the variation-selection-retention cycle prevalent in organizational evolutionary theory (e.g. Aldrich, 1999; Zollo & Winter, 2002).

In the words of Weick, ecological change refers to the changes frequently occurring in "the flows of experience that engage people and activities" (Weick, 1979, p. 130). Humans' attention to such changes is only activated when drawing on past experiences becomes insufficient to make sense of the current flow of experiences. Crisis settings typically deviate significantly from peoples' expectations and past experiences. Therefore, when put in a crisis setting, people have to enact their environment, i.e. through their actions they "bring events and structure into existence and set them in motion" (Weick, 1988, p. 306). The selection process of organizing refers to selecting schemes of interpretation and specific interpretations, "some cause maps repeatedly prove helpful in reducing the equivocality of displays, whereas other maps add to the equivocality" (Weick, 1979, p. 131). The cause maps are built up out of past experiences. Over time, those cause maps and enacted environments that have proved successful are stored (retention), and are likely to be selected and enacted in the future when experiencing similar flows of experiences.

The notion of cause maps, and Weick's work more generally, builds on well-established findings in cognitive psychology research. Human action is often based on intuitive judgement. We draw on what psychologists call "heuristics", mental shortcuts, which usually involve simplifying a complex problem by focusing on one or a few aspects ("cues") of the problem. These heuristics normally work quite well, but do not always give a correct picture of the situation (Kahneman, 2011; Tversky & Kahneman, 1973). Humans are inclined to seek confirmations of the hypotheses and expectations they have, rather than disconfirmations (Nickerson, 1998), which can result in erroneous cognitive biases. When put in stressful conditions like a crisis setting, individuals become less flexible in their perception and choice of solution methods (Staw,

Sandelands, & Dutton, 1981). This does however not necessarily imply making cognition and decision errors, because "in the case of the trained subjects, the rigidified response is appropriate for task performance" (Staw et al., 1981, p. 504). The decisive factor is thus whether the dominant habituated responses are performance-relevant or not, which points to the importance of practice: working experience, training and education (Dreyfus & Dreyfus, 1986; Flyvbjerg, 1991).

The evolutionary practice perspective elucidates why crisis settings are challenging cognitively for the human brain and how relevant practice, for example crisis exercises and training, can help ease this challenge. The perspective is of little help, however, when it comes to those situations where humans have few or little experiences and they do not have any relevant cause maps to draw on.

2.3.3 Coordination as emergence

In contrast to the design and evolutionary practice perspective, the emergence perspective focuses on the actual actions of the coordination. Unlike classical disaster sociology literature (Dynes, 1970), there is now a growing consensus in current disaster sociology literature that upon crises, organizational behavior deviating from existing structures also emerges in crisis-experienced organizations like emergency agencies, not only in crisis-inexperienced organizations (see Wachtendorf, 2004, pp. 10–14 for a discussion).

Recent studies on crisis coordination in emergency agencies by management and organizational theory scholars have made similar observations. These scholars emphasize the role of emergence when emergency agencies coordinate their activities by stressing inter alia the importance of flexible role structures ("role-shifting" Bechky & Okhuysen, 2011; "delegating tasks" Wolbers et al., 2018) and deviation from extant plans and procedures ("protocol breaking" Faraj & Xiao, 2006; "working around procedures" Wolbers et al., 2018). Wolbers et al. (2018, p. 1540) conclude that "coordination practices in the fast-paced environment of emergency management create fragmentation, rather than integration". The researchers observed ad hoc adaptations that cannot be planned or prescribed, separate pockets of control that emerge, and parallel and partly overlapping sense-making processes resulting in a multiplicity of interpretations.

An underlying assumption in these strands of literatures seems to be that little can be assumed prior to crisis and disaster responses because plans and structures break down. The following formulation can serve as an exemplar, "it is impossible to predict which organizations will and will not engage in disaster response; what tasks, people, and knowledge are needed; and how expertise will be coordinated in an emergent group" (Majchrzak et al., 2007, p. 148). Consequently, this perspective focuses on describing the coordination that emerges in crisis settings and explanatory factors are derived primarily from the distinct crisis setting.

But the fact that emergent response groups are prevalent in crisis responses and play a decisive role, and that emergency agencies sometimes adapt their structures and deviate from extant procedures, does not necessarily imply that all plans are obsolete and any prediction of who will take part and what they will do in the event of a crisis is impossible. How can organizational units, located at different locations and who have mutual trust, find each other and achieve a coordinated response if the units are shifting roles and breaking extant procedures?

2.3.4 Synthesizing the three perspectives

Now I turn to the question of how I employ the three perspectives in this thesis. I use a synthesizing research strategy, i.e. I do not see the three theoretical perspectives as separate, but parts of a totality (Roness, 2009).

Adhering to the presupposition that social phenomena exhibit a "double reality", I perceive the design and evolutionary practice perspectives as interdependent and complementary perspectives. This notion of duality (rather than dualism) and the emphasis on practice and agency as outlined here is a key tenet in much of the recent work in organizational theory, although their concepts and conceptualizations differ. Examples are the growing literature on practice theory (Feldman & Orlikowski, 2011), the growing emphasis on agency in institutional theory (Lawrence et al., 2012; Powell & Colyvas, 2008), and recent work conceptualizing organizational change and stability as a duality rather than mutually exclusive concepts (Farjoun, 2010; Farjoun, Ansell, & Boin, 2015).

The organizational design is part of the normative structure in the organization embodying what is supposed to be, while the evolutionary practices are a factual order embodying the "living" organization as it is (cf. Jacobsen, 1963). In the words of Davis (1949): "[T]hese two orders cannot be completely identical, nor can they be completely disparate" (Davis 1949, 52 cited in W. R. Scott, 1981, p. 14). All practices in the organization are conditioned by the existing purposive formal normative structure of the organization (cf. design). At the same time, the crisis coordination practices that have proved successful and have been stored in the incumbents may manifest themselves and institutionalize into informal normative structures, i.e. stable expectations of the roles (not the incumbents) in the organization on how different types of problems are supposed to be handled, and who does what (Egeberg, 1984, p. 21; W. R. Scott, 1981, p. 14). The informal normative structures may reinforce the purposive formative structures, but can also weaken them. The latter is the case when the informal normative structures deviate from, or are in conflict with, the purposive formal structures.

At the same time, crisis coordination often deviates from the existing organizational design and extant practices (cf. the emergence perspective). But such deviations do not by definition imply that organizational design and extant practices are obsolete in crisis settings. On the contrary, I would argue that pre-existing structures and practices do play a role in crisis coordination. Many scholars adhering to an emergence perspective would agree with this argument. For example, Faraj and Xiao (2006) talk about "protocol breaking" *and* "reliance on protocols". Thus, crisis coordination may be in accordance with pre-existing structures and practices, but it may also deviate and rather take the form of improvised actions that emerge in response to characteristics of the particular crisis setting. This begs the question: what are the sources of improvised actions that deviate from existing design and practices that seem to be an integral part of any crisis coordination?

In the words of Berliner (1994), improvisation is about more than simply "making something out of nothing (…) Improvisation involves reworking pre-composed material and designs in relation to unanticipated ideas conceived,

shaped, and transformed under the special conditions of performance, thereby adding unique features to every creation" (Berliner, 1994, pp. 492, 241) (cited in Wachtendorf, 2004, p. 25). In a similar vein, Cunha et al. (1999, p. 302) defines improvisation as "the conception of action as it unfolds, by an organization and/or its members, drawing on available material, cognitive, affective, and social resources". Several scholars have used the vehicle of jazz and theatre improvisation as a source for orienting their ideas and arguments (e.g. Berliner, 1994; Hatch, 1999; Vera & Crossan, 2004; Weick, 1998). A basic point they make is that organizational improvisation is not without structure.

To sum up, improvisation is largely about "reworking" and "drawing" on existing "materials", "design" and "resources" (akin to what I call capacities) (see Frykmer et al., 2018 for a review of this literature). Or, in the words of Weick, Sutcliffe and Obstfeld (1999, p. 47), "the capability to recombine actions already in [the organizational] repertoire into novel combinations". In the following I conceptualize improvisation as reworking and drawing on pre-existing materials, design and capacities. Based on the discussions thus far, I argue that crisis coordination is not induced solely by either organizational design, evolutionary practices or improvised actions that emerge upon the occurrence of a crisis incident. By contrast, I argue crisis coordination, regardless of being improvised or not, is both constrained and facilitated by pre-existing structures (cf. "design") and practices (cf. "evolutionary practices"), and the materials the individuals have available in the particular setting they are in.

2.3.5 Directive actions and crisis coordination: a descriptive typology

For analytical clarity and rigorous analysis, I construct a typology of coordination actions.[4] Subsequently I sketch an analytical framework that builds on the typology and integrates the three theoretical perspectives on coordination.

Drawing on a number of recent case studies of crisis management Boin et al. (2005, p. 147) argue that one important success criterion for the outcome of

[4] "Coordination actions" refers to both actions that are part of an on-going coordination process, and to directive actions to bring about coordination.

the crisis response is: "alert and decisive individuals and (…) organizations [that] worked together in innovative ways". Building on the discussion thus far, I assert that crisis responses, as any organizational behavior, may be coordinated by pre-existing structures and practices. However, the unexpectedness and disruptiveness of the crisis incident may hamper the effectiveness of the pre-existing structures and practices, and ultimately result in their collapse (Weick, 1993). In such settings, there is a need for improvised actions to fill the void. This may take various forms, from adapting due to changes in the pre-existing structures and practices to enacting novel ways of coordination.

I take Wachtendorf's (2004, pp. 30–31) descriptive typology of organizational improvisation in crisis and disaster responses as a point of departure, and construct a descriptive typology of actions in crisis responses delineated to crisis coordination. These actions can be part of the actual coordination or they can be directive actions to bring about coordination (cf. 1.3). I distinguish between four types of actions. The first two types are enactments of pre-existing structures and practices, while the last two types are improvised actions that emerge in response to characteristics of the crisis setting.

i) Routinized actions, i.e. actions enacting pre-existing structures or practices.

ii) Contingent actions, i.e. actions enacting alternative pre-existing structures or practices (enacting a "plan B") that are resorted to when the impact of the crisis exceeds the organization's capabilities and routinized actions thus prove insufficient.

iii) Adaptive improvisation, occurs in situations where a structure or practice (either pre-existing or improvised) is temporarily unavailable or deemed inappropriate due to developments in the crisis setting.

iv) Creative improvisation, can take place in situations when there are no pre-existing structures or practices to contend with the emergent demands from the environment the organization(s) and its members operate in.

The four types of coordination actions can be organized along one dimension where the extremes are highly pre-structured (routinized action) and highly improvised (creative improvisation).

The analytical framework below illustrates how in-crisis coordination, including the four types of coordination actions, is conditioned by pre-existing crisis coordination structures and practices (shortened structures and practices). The coordination actions on the left side can be linked to the design and evolutionary practice perspectives, while those on the right side can be linked to the emergence perspective. Thus, the design and evolutionary practice perspectives emphasize that there was a time prior to the crisis incident, which conditions the present. In contrast, the emergence perspective emphasizes what actually happens in the particular crisis setting, and how this may deviate from the pre-existing structures and practices.

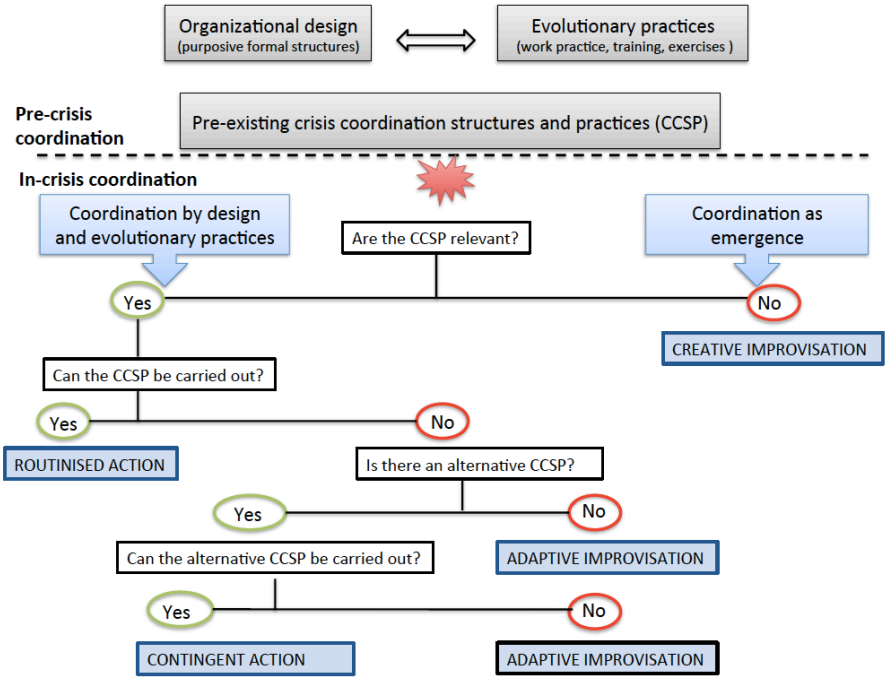

Figure 2.1: Crisis coordination actions decision tree.

When assessing whether the pre-existing structures and practices are relevant for the particular setting the responders are situated in, they try to make sense of what is going on. They draw on the information they have available and any communication they have had with others. There are multiple processes of information sharing happening simultaneously resulting in a multiplicity of interpretations (Bharosa et al., 2010; Wolbers et al., 2018); what information the different individuals have may differ at any point in time; and what information the respective responders have may change abruptly from one second to the next as the crisis response unfolds.

These brief remarks on how the role of the past; multiple, parallel processes; and swift changes in the crisis setting; can have significant impact on the in-crisis coordination bring our attention to the role of time. For a more rigorous understanding of how crisis coordination actually happens, and why, I argue we need to develop theoretical and analytical frameworks that take into account the multidimensional role of time in crisis coordination.

2.4 The multidimensional role of time in crisis coordination

2.4.1 Five dimensions of time in crisis responses

Crises trigger a disrupted context (Hällgren, Rouleau, & Rond, 2018) characterized by turbulence and temporal complexity. The combination of urgency and the highly variable interaction of events and demands induce the temporal complexity. Time is central in crisis coordination in at least five ways. First, time as *history*: crisis responses do not happen in a vacuum but are a series of actions situated in a larger historical-institutional context (Pierson, 2004; Pollitt, 2008). Consequently, crisis responses are conditioned by pre-existing structures and practices in the organizations involved (Snook, 2002) as well as the rules, norms and values of the broader political and institutional context the

organizations operate in (Allison, 1969; Boin & Lodge, 2016; Christensen, Lægreid, & Rykkja, 2016a; Vaughan, 1996).

Second, time as *urgency*: in the event of a crisis there is a need for swift actions and response. In other words the tempo (also referred to as pace and/or intensity) of the activities that are conducted is of utmost importance (Fleischer, 2013). Moreover, the crisis may develop in unexpected ways and thus create new surprises during the crisis response (cf. Cunha et al., 2006).

Third, time as *timing*: when and how people receive information about problems; when and how people establish contact and interact; and, when and how people engage to handle a problem or set of problems and their interaction in handling the problems. The timing of the aforementioned processes affects the crisis coordination and overall crisis response.

Fourth, time as *sequential logic* (cf., e.g. Abbott, 1983): I argue the time dimension of crisis coordination has an additional aspect in "sequential crises", i.e. crises where the first crisis incident is followed by new crisis incidents within a short time span. This was the case on 22/7. First there was a bomb explosion, then a shooting massacre unfolded approximately two hours later. The coordination and response to the second incident was contingent on how the police responded to the first incident. As I will demonstrate in the empirical analysis, some aspects of the initial crisis coordination had a positive effect for how swiftly the police could mobilize and coordinate capacities towards Utøya, while other aspects had a negative effect. The more general point is that there was an internal sequential logic in 22/7, which had implications for the crisis coordination.

Fifth, the interplay between time as chronological, i.e. present, happening now, and kairotic time, time as past, which "jumps and slows down, omits long periods and dwells on others" (Czarniawska, 2004, p. 775). The chronological and kairotic time distinction has also been conceptualized as objective and subjective time respectively. The latter cannot be directly experienced, because it must be "socially constructed and [is] expressed in perceptions and expectations" (Fleischer, 2013, p. 315). The point is that "[n]obody is aware that an important event is happening when it takes place (…). Events must be made

important or unimportant" (Czarniawska 2004, p. 776; cf. Law 1994). Post-crisis accounts tend to focus on the "critical" moments in the crisis response. Moreover, post-crisis accounts tend to have a hindsight bias, i.e. draw on facts that we know in retrospect but that was unknown (or uncertain) at the time for those involved in the crisis response. I employ a prospective research strategy to mitigate the risk of hindsight bias (elaborated in chapter 3).

2.4.2 Time in crisis management research

In the following I provide a brief review of how extant crisis management research has dealt with the notion of time. Although crisis management research acknowledges the centrality of time in crisis and crisis responses, I contend that the extant literature on crisis coordination has devoted little attention to how crisis coordination is conditioned by the multidimensional role of time.

Time acknowledged as important

That time is a central dimension in the study of crisis management is well established in extant literature. For example, urgency is considered by most scholars to be a defining feature of crisis (e.g. Boin et al., 2016; Hermann, 1963; Pearson & Clair, 1998; Rosenthal et al., 1989). Furthermore, many analytical frameworks in the crisis management literature are developed along a time dimension, distinguishing between different stages of the crisis. The most simple frameworks (in terms of numbers of phases) distinguish between a pre-, a crisis and a post-crisis phase (e.g. Smith, 1990), while others make more distinctions. For example, Pearson and Mitroff (1993) distinguish between four "time phases or stages through which nearly all crises pass" (Pearson & Mitroff, 1993, p. 52). These are signal detection, preparation/prevention, containment/damage limitation and recovery. Such frameworks can be useful as analytical frameworks at an aggregate level, but offer little, if any explanatory power on the role of time in actual crisis responses. Moreover, such frameworks can give the impression of crisis response as one sequential, linear process.

The time dimension has also been used as a starting point for developing crisis typologies. For example, 't Hart and Boin develop a crisis typology based on the speed of the development (instant/creeping), and the termination

(abrupt/gradual), of the crisis to allow for "discerning different types of crisis trajectories" ('t Hart & Boin, 2001, p. 31). Such typologies can be useful as an analytical starting point for comparative research on how crisis coordination is conditioned by the temporal order in different ways in different types of crises. But in order to do that, we need a framework to study the role of the temporal order in single case studies of crisis coordination.

Time as history

The importance of time as history for crisis management literature is demonstrated by seminal case studies of crises and disasters such as Vaughan's study of the Challenger disaster (Vaughan, 1996), Snook's study of how the U.S. Air Force accidentally shot down two U.S. Army helicopters over northern Iraq in 1994 (Snook, 2002), and Zeghart's study of the (lack of) collaboration between CIA and FBI before and during 9/11 (Zegart, 2009). Common for these studies is that an important part of their analysis of why they responded as they did, is analyzing the organizations under scrutiny in the years prior to the time the crisis occurred, and more broadly the environment they operated in.

For instance, based on his in-depth case study of the accidental shooting down, Snook argues that the friendly fire came as a result of "practical drift" (Snook, 2002, pp. 186–201). His basic point is that the practice by the operators and the pilots in the field gradually were uncoupled from the formal rules and procedures, because "the rules didn't match the situation *most* of the time" (Snook, 2002, p. 193). A discrepancy emerged between the rule-based logics of action the formal structures prescribed and the task-based logics of action that the operators and pilots practiced. Hence, when studying crisis coordination, we cannot rely solely on examinations of the actual crisis responses cross-checked with the existing formal structures. We must also examine the pre-existing practices, because they can manifest themselves as informal norms that guide the behavior of incumbents in the organizations.

The issue of crisis coordination is arguably also conditioned by broader historical characteristics of the organizations involved, and the environment they operate in. These are core themes in the historical institutionalism tradition (Krasner, 1989; Pierson, 2004). Proponents of historical institutionalism reject

the idea that "the same operative forces will generate the same results everywhere', and argue instead that 'the effect of such forces will be mediated by the contextual features of a given situation often inherited from the past" (Hall & Taylor, 1996, p. 941).

Time as timing

The framework developed by Boin and colleagues (2005; 2016) focusing on the critical tasks for the leaders of crisis management allude to the importance of time as timing. The authors acknowledge that much of the activities in a crisis response, especially in the early stages "is usually in the hands of a diffuse network of actors" and it is thus "difficult (…) for leaders to control the course of crisis events" (Boin et al., 2016, pp. 16–17). Then the question is how the information sharing processes and joint actions taken by the "diffuse network of actors" is conditioned by "the course of crisis events"?

Network approaches to the study of crisis coordination have given us insights on the myriad of interactions that unfold in crisis responses and how complex and intertwined these diffuse networks of actors can be. Thus, a network approach can map the terrain of actors involved, inform us on who were the most central nodes in the network and how this may have changed as the crisis unfolded (e.g. Kapucu, 2012; Moynihan, 2009). However, the findings of such studies should be treated with caution as it is very difficult to document all lines of interaction that occur during a crisis response. More important in the context of this discussion, a network approach may map (parts of) the diffuse networks of actors, and indicate that changes in the network as the crisis unfolded may have been conditioned by the temporal order. However, a network approach has less to offer in explaining *how* these changes in the diffuse network of actors came about and *why*.

The literature on sense-making does indirectly refer to the role of time as timing by offering insights on the interplay between meaning and pre-existing normative structures (Cornelissen, Mantere, & Vaara, 2014; Weick, 1993). Related to timing, the sense-making literature highlights the importance of understanding how meaning is created individually and collectively by those involved as the crisis response unfolds and that this has important implications

for their actions, communication and coordination. A limitation of this literature is that it has thus far primarily focused on micro-level processes, individual cognition and group dynamics, while there has been less attention to how sense-making processes are conditioned by organizational characteristics beyond group-level dynamics and more macro-oriented issues such as politics, power and institutions (Maitlis & Christianson, 2014; Maitlis & Sonenshein, 2010; Weick, Sutcliffe, & Obstfeld, 2005).

The role of time in crisis coordination

To conclude this brief review, existing crisis management literature certainly does acknowledge the importance of time in crisis coordination. However, I contend that the role of time, timing in particular, but also time as history, has been given limited attention in conventional accounts of crisis coordination, which is puzzling if we accept the premise that time-centered analysis adds explanatory value to the studies of organizational and governmental crisis responses (cf. Fleischer, 2013). In the two subsequent sub-chapters, I develop a theoretical-analytical framework on crisis coordination that incorporates the multidimensional role of timing.

The next sub-chapter focus on the first dimension – time as history, on how in-crisis coordination is conditioned by pre-crisis coordination (2.5). Building on seminal works in organizational theory I briefly describe how organizations are resistant to change and that changes tend to be path-dependent. Then I theorize how the division of work, habits and repeated practices are likely to affect in-crisis coordination. In the subsequent sub-chapter, I sketch a multiple streams framework on in-crisis coordination (2.6). The framework is an operationalization of three of the time dimensions – time as urgency, timing and sequential crisis – and, how they affect in-crisis coordination. The fifth dimension of time, the interplay between chronological time and kairotic time, is more of a meta-theoretical point. It is related both to how we approach the study of crisis coordination methodologically, and to the post-crisis phase when we are trying to find the answers to what happened and why. A simple, but important, methodological argument in this thesis is that these two latter issues are closely related. How we approach the study of crisis coordination have

consequences for what conclusions we draw regarding what happened and why. I return to the fifth dimension of time when elaborating my research strategy in chapter 3.

2.5 Pre-crisis coordination: Building crisis coordination capacity

I have argued that crisis coordination is induced by the interaction of pre-existing structures and practices and improvised actions that emerge in the crisis response. Following this line of argument, in-crisis coordination is to a considerable extent a result of what political and organizational efforts have been taken to build crisis coordination capacity[5] in the organizations involved in the crisis response in the years prior to the crisis incident (cf. time as history). And more specifically, the in-crisis coordination is also induced by how crisis coordination was designed (cf. design perspective), and whether crisis coordination was practiced frequently (cf. evolutionary practice perspective), either through real incidents or training and exercises, in the years prior to the crisis incident. I touch upon these issues in the subsequent three sections.

2.5.1 Situated actions, organizational stability and change

Historical institutionalists emphasize that organizational change is path-dependent; when and how organizational change happens hinges on the context in which the organizations operate. The notion of path dependence has several implications for how organizations are expected to change (or not) over time. Organizational trajectories are conditioned by institutions, and these institutions are resistant to change. Initial decisions, even suboptimal ones, can become self-reinforcing over time because the cost of making an initiative to change the

[5] The term is inspired by the analytical framework by Lodge and Wegrich where they distinguish between different types of administrative capacities in the modern state, one being coordination capacity (Lodge & Wegrich, 2014). Similar wordings are used in the crisis management literature as well such as "capacity for coordination" (Comfort, 2007), "crisis management capacity" (Boin & Lagadec, 2000; Kuipers, Boin, Bossong, & Hegemann, 2015) and "governance capacity" (Lægreid & Rykkja, 2018).

direction of the development of the organization is considered too high and therefore avoided (Pierson, 2000, pp. 491–492; cf. North 1990; Krasner 1989).

Historical institutionalism conceptualizes the trajectories of political institutions and national states as being characterized by long periods of stability and incremental change punctuated by critical junctures, i.e. moments of substantial institutional change when the organization takes a different path (Hall & Taylor, 1996; cf. S. D. Krasner, 1984). A prominent example of critical junctures are crisis incidents, which brings some questions high on the political agenda and the political will to induce policy change is higher than under stable conditions. It varies to what extent the policy measures taken result in changes in the normative structure of the organization or if the changes are primarily symbolic (Birkland, 2006; Boin, McConnell, & 't Hart, 2008; 't Hart, 1993).

Organizations may gradually turn into institutions, i.e. the formal structures set up by the organization may be infused with values beyond its technical requirements (Selznick, 1957, pp. 16–17). For example, differentiated organizational units develop vested interests and become centers of power "by creating administrative rituals, symbols and ideologies" (Selznick, 1992, cited in Scott, 2013, p. 146). Over time, and through repeated practices, these interests and values become embedded in the organizational structure. Whether attempts to initiate organizational change are likely to succeed hinges on "the mobilization of bias" (Schattschneider, 1960, p. 71). What is the power balance between the actors involved in the process, the dominant values and myths, and the established political procedures and rules of the game (Bachrach & Barat, 1962, p. 952)?

2.5.2 The division of work: specialization and coordination

A classic insight in the organizational theory and public administration literatures is that dividing the work into sub-units results in boundedly rational decision-making processes, akin to how cognitive characteristics constrain individual decision-making (March & Simon, 1993; Simon, 1997). Organizations solve problems by delegation to specialized sub-units. The sub-units develop their own sub-goals that can result in biased attention and problem searches, and sub-optimal behavior (Cyert & March, 1992).

As Gulick argued, "it is not possible to determine how an activity is to be organized without, at the same time, considering how the work in question is to be divided" (Gulick (1937, p. 1), cited in Kettl, 2003, p. 258). Gulick argued that there are only four ways of organizing: purpose, process, person and place – each having its advantages and disadvantages (Gulick, 1937). In practice, organizations' division of work are often based on a combination of several of the principles outlined by Gulick. I discuss coordination challenges related to the two principles that are the most relevant for the scope of this thesis: purpose and place, which I call functional and geographical specialization respectively.

Functional specialization is prevalent in any network of first responder organizations. The different organizations have specific tasks and responsibilities when a crisis incident occurs. In a similar vein, the different organizations have typically divided their tasks into sub-tasks and sub-responsibilities, and delegated these to organizational sub-units. One challenge is the risks of "overlap", that several organizations, or several units within the same organization, have overlapping responsibilities (Wegrich & Stimac, 2014; Lodge, 2013). Two types of scenarios are likely to occur: several response units assume they are in command or all potential response units assume someone else is in command. The former is likely to cause confusion and miscommunication, while the latter will result in a delayed crisis response. From a design perspective the risk of overlap problems can be reduced by clear assignment of responsibilities in crisis and contingency plans and imposing priorities within and between the different organizations (Wegrich & Stimac, 2014, pp. 50–51). From an evolutionary practice perspective an overlap problem in the realm of crisis coordination, is related to the lack of practice. Because there have been few opportunities to practice scenarios similar to the crisis incident in a realistic manner, they have been unaware of the overlap problem inherent in how they organize and practice their crisis coordination.

Another challenge related to functional specialization is the risk of "underlap". In contrast to overlap, the problem of "underlap" refers to a situation where a crisis incident occurs, and the incident creates problems which fall between existing jurisdictional boundaries of the first responder organizations,

so that it becomes the responsibility of no one, or at least it is unclear whose responsibility it is (cf. Wegrich & Stimac, 2014, p. 45). Then there is a considerable risk that none of the potential response units will respond because they all assume it is the responsibility of someone else. From a design perspective, the risk of the underlap problem can be reduced by designing incentive structures and procedures that emphasize the importance of taking action: for example, having codes of conduct stating that emergency professionals have an individual duty to act in the case of emergency. From an evolutionary practice perspective, the underlying cause of an underlap problem is similar to the overlap problem. It is related to few opportunities to practice scenarios similar to the crisis incident in a realistic manner.

Specializing based on a geographic principle enhances first responder organizations' capacity to effectuate a swift response, irrespective of where the crisis incident occurs. Coordination challenges related to geographical specialization occur when crisis incidents span geographical boundaries. – for example a forest fire that spans several Fire and Rescue Service districts (Bynander, 2019), or a joint terrorist attack executed by multiple terrorists at different locations – a quintessential example is the 9/11 attacks in the U.S. In such scenarios, a key challenge is to coordinate the mobilization (Ansell, Boin, & Keller, 2010). Which geographical divisions are supposed to enact directive actions to mobilize and dispatch capacities, and who coordinates the overall mobilization across both functional and geographical boundaries? From a design perspective, the prescription is what Ansell et al. (2010, p. 203) call a "transboundary authority structure", i.e. "formal structures that prescribe how decision-making authority is organized across geographical, policy and time boundaries". From an evolutionary practice perspective, the important point is that these transboundary formal structures are tested and exercised regularly. It is important to build common knowledge across the geographical and functional boundaries. Exercising and training across the boundaries yield common experiences resulting in shared knowledge on each other's tasks and responsibilities (Hecker, 2012, pp. 426–427).

A related tension concerning geographical specialization and collective knowledge is the balance between standardization and local adaptation. If the geographical units do not use the same operating principles, guidelines and procedures and the same databases, software programs and technologies, they may have difficulties collaborating. At the same time, differences in the environment that the units operate in and what problems they face may call for local adaptations (Hecker, 2012).

2.5.3 Habituated responses and trained incapacities

Crises are by definition low in frequency, come unexpected, and extant organizational design may prove inadequate to handle the crisis efficiently. As humans are inclined to draw on habituated responses when put under stress, it is important to increase the likelihood that the organizational members will enact performance-relevant frameworks. The more experienced individuals are with being in crisis situations, and the more varied these experiences are (different types of crisis), the better able they will be to respond. This is because they will have a broader repertoire of possible frames to select from (Kahneman & Klein, 2009; Weick, 1988), and it is more that the selected frame will be performance-relevant.

In other words, investing time in the development of skills in improvisation and bricolage, will over time enhance the individuals' "receptiveness and generation of role improvisations" (Weick, 1993, p. 640). Moreover, by joint training and exercises the participants will "draft agreement on their work" and "build cross-member expertise", which enables them to shift roles and reorder their work when necessary during a crisis response (Bechky & Okhuysen, 2011). By contrast, the lack of varied training can result in one's abilities functioning as incapacities or blind spots, if the environment suddenly changes from what you have trained on (Merton, 1940, p. 562). Moreover, given the low frequency of crises, "lessons learned" from real life experiences should be treated as ambiguous in the sense that existing design and practices that may have proved successful in the past does not necessarily mean they will prove successful in the future (Levitt & March, 1988; March, Sproull, & Tamuz, 1991).

Turning to the organizational level, two factors seem to be of particular importance. First and foremost, it is important that the organizations have sufficient training and exercises (both in frequency and variation) to prepare its members for the different types of problems the organization is expected to handle. Giving sufficient time to training and exercises is at the end of the day a question of prioritizing, which can be a challenge because prioritizing one issue normally means down-prioritizing other issues. Moreover, prioritizing crisis preparedness over other policy issues can be a challenge because crises rarely happen and politics are agenda-driven (cf. Kettl, 2003).

Secondly, it is important to develop an "experimental culture" that is tolerant of competent mistakes (Vera & Crossan, 2005, p. 207), because the organizational members will then be more inclined to be proactive and improvise if existing structures are disrupted by the crisis. By contrast, if competent mistakes are sanctioned it is likely that organizational members will be reluctant to deviate from existing practices (improvise), even when there are sudden changes in the environment and/or existing structures are disrupted making improvisation seem like a viable option.

2.6 In-crisis coordination: A multiple streams framework

In this sub-chapter I develop a multiple streams framework on in-crisis coordination that takes into account the role of time as timing, urgency and sequential logic. The framework draws inspiration from the garbage can model (GCM) (Cohen et al., 1972) and policy streams framework (PSF) (Kingdon, 1984), adapted to the field of crisis management. A commonality of these seminal works is that they both have time as their analytical focus.

By using a synthesizing research strategy, the insights from the three theoretical perspectives outlined in 2.3 form important building blocks in the multiple streams framework. The framework encompasses the seeming contradiction that although in-crisis coordination often is enabled by pre-existing structures and practices, in-crisis coordination sometimes deviates from the same pre-existing structures and practices, i.e. take the form of improvised coordination actions (cf. the model in 2.4.5).

I assert that processes of crisis coordination are conditioned by the interaction of three streams: information, capacities and problems. I focus on two types of interactions. The first is the interaction between streams of capacities and streams of problems, more specifically the process of coupling capacities to the problems that need to be handled. I theorize when, where, how and why capacities are likely to be coupled with problems, what I call problem-couplings. Furthermore, problem-coupling is one of two necessary conditions that have to be fulfilled before crisis coordination can take place: (i) Someone has to become aware that there has been a crisis incident, i.e. information-coupling (explained below). It is impossible to respond to an incident whose existence you are unaware of. (ii) Someone has to respond by taking directive action to bring about problem-coupling, i.e. to mobilize and dispatch relevant capacities to handle the incident. Given the focus on time as timing, I also theorize when, how and why crisis coordination is likely to happen in the first place.

The second type of interaction I focus on is the interaction between streams of information and streams of capacities, which refers to the information sharing of the crisis coordination. I theorize when, where, how and why information is likely to be coupled with capacities, what I call information-couplings, during a crisis response. Furthermore, I theorize how people involved in crisis coordination try to enact and maintain a shared situational awareness, and potential barriers related to this.

To summarize the framework in brief, I argue that whether and when the two necessary conditions – awareness that a crisis incident has occurred, and directive action to bring about crisis coordination in response to the crisis incident – are likely to be fulfilled, and the subsequent interaction of the three streams, is conditioned by a combination of pre-existing crisis coordination structures and practices, the routinized and improvised actions that emerge in response to the crisis, as well as temporal and material characteristics of the particular crisis setting.

In the next section I provide a brief discussion of the GCM and PSF, and their relevance and applicability for the field of crisis coordination (2.6.1). In the two subsequent sections I explain how I conceptualize directive actions (2.6.2),

information sharing and information-couplings in crisis coordination (2.6.3), and I theorize when and why directive actions and information-couplings are likely to occur. In the final section I turn to the process of enacting a shared situational awareness of what is going on and what needs to be done next, by whom, when and how, based on the information that is shared (2.6.4).

2.6.1 The temporal order as locus: Garbage cans and policy streams

Although GCM and PSF stem from other scholarly fields than the crisis management field, there are two reasons why I would argue they are fruitful sources for inspiration for the scope of this thesis.

First, and most important, the selection of GCM and PSF follows from this thesis' focus on time. Both the GCM and PSF take the temporal order of the process as their analytical locus. They argue that the timing and interaction of multiple streams are important to understand how organizational decision-making and policy-making actually happen and why these processes sometimes produce results that may seem irrational or counterintuitive for the distant observer. Given that time as timing plays a pivotal role in crisis coordination, as I argue, the GCM and PSF may offer relevant ideas and insights. Moreover, I contend that putting emphasis on the role of timing in crisis coordination can enhance our understanding of crisis coordination processes that in retrospect may seem irrational and flawed.

Second, although there is difference in substance between GCM and PSF and the framework I develop, I would argue there is also much overlap. Policies are made and changed via decisions. Moreover, focusing on the meso-level rather than the micro-level, the GCM and PSF are more interested in the interactions and dynamics between the actors in the organizations and networks, and how these are conditioned by organizational characteristics and the environment, rather than individual characteristics. In a similar vein, actions, decisions and the interdependence between the actors involved, are integral parts of coordination as I define it in this thesis. Moreover, I focus more on the interactions and interdependencies than the individual actors and why they act as they do.

In the following, I briefly outline the basic ideas of the GCM and PSF and discuss their applicability to the field of crisis management and crisis coordination more specifically. The discussions are delineated to points of relevance for the context of this thesis. I end by explicating how my streams framework on crisis coordination builds on the GCM and PSF, what is new in my framework, and why I have made the adjustments and supplements that I have.

The garbage can model

The original garbage can model was developed to explore decision-making in what the authors called "organized anarchies" (Cohen et al., 1972; see also March & Olsen, 1976). The authors' goal was not to develop a full-fledged theory, but rather "to elaborate and modify existing theoretical ideas about organizational decision making to make sense of some empirical observations" (J. P. Olsen, 2001, p. 191).[6]

Organized anarchies are organizations or decision situations characterized by problematic preferences (goals are vague, inconsistent, contested or unstable), unclear technology (the connection between means and ends is not well understood) and fluid participation (the attention of the decision-makers is a scarce resource and their involvement is unstable or uncertain) (Jann, 2015, p. 3). These three properties are "characteristic of any organization in part – part of the time" (Cohen et al., 1972, p. 1).

A relevant question for the context of this thesis is whether crisis responses by the first responder organizations can be construed as decision-making in organized anarchies. Crisis responses are evidently characterized by unclear technology, there is deep uncertainty with regard to causes, consequences and intervention options (Ansell et al., 2010, p. 197). Furthermore, fluid participation is characteristic for any crisis response. There is a surge of problems that need to be handled and a surge of people mobilized to handle the problems. The sense of urgency, characteristic for any crisis setting, leaves little

[6] For a discussion of whether the GCM is to be understood as a theory or not, see Bendor, Moe, & Shotts, 2001; J. P. Olsen, 2001.

time to each issue that needs attention, and mobilized people enter with no or little information on "what's the story here" (Weick, Sutcliffe, & Obstfeld, 1999). It is not equally evident that crisis responses are characterized by problematic preferences. All those involved in a crisis response share the goal of ending the crisis as efficiently as possible. Still, as observed by crisis management and disaster scholars, there are often different views among those involved on how to end the crisis. For example, what the meaning of the crisis coordination is and who, if anyone, should be in command (Boin et al., 2016, Chapter 5; Quarantelli, 1988). Based on these considerations, I assert crisis coordination by first responder organizations fulfils the three definitional criteria of "organized anarchy".

The GCM consists of four streams, which exist relatively independently of each other within an organization: problems, solutions, participants and choice opportunities. The GCM grew out of empirical studies[7] demonstrating that how actual decision-making in organizations happened often differed substantially from the rational choice inspired models dominating the field of organizational decision-making at the time. To understand organizational decision-making in organized anarchies we need to examine "[the] relatively complicated interplay among the generation of problems in an organization, the deployment of personnel, the production of solutions, and the opportunities for choice" (Cohen et al., 1972, p. 2).

The garbage can label is used as a metaphor for a choice opportunity in an on-going decision-making process in an organization (which is an organized anarchy). A choice opportunity is a garbage can "into which various kinds of problems and solutions are dumped by participants as they are generated" (Cohen et al., 1972, p. 2). Who the participants are and thus what problems and solutions are "dumped" in the garbage can is impacted by the organizational structures, of which two types of are emphasized by the GCM-authors. The decision structure decides who is eligible to take part in the choice, while the

[7] Its main source was seven studies of universities (see Cohen et al. 1972, p. 2 footnote 2 for an overview), but has later been employed on many different fields (Bendor et al., 2001; Cohen, March, & Olsen, 2015; Jann, 2015).

access structure impacts the mapping of problems onto choices (Cohen et al., 1972, pp. 3–4).

A core argument of the GCM is that decisions in organized anarchies "to a large extent are much more the result of temporal linkages, the arrival and departure time of independent and exogenous streams of problems, solutions, decision-makers, and choice opportunities, than the consequences of careful analysis and deliberate choices" (Jann, 2015, p. 4).

Moreover, it is argued these temporal linkages are conditioned by organizational structures. The argument is threefold. The organizational structure of the decision-making processes: i) affect the time pattern of the arrival of problems, choices, solutions, or decision makers, ii) determines the allocation of energy by potential participants in the decision; and iii) establishes linkages among the various streams (Cohen et al., 1972, p. 4). In the early years, most scholarly attention was directed to the un-segmented version of the model, i.e. no structural constraints. Gradually, however, there was a growing understanding that "the idea of temporal garbage can processes (…) need not be restricted to such situations" (March & Olsen, 1986, p. 4; see also Lægreid & Roness, 1999; Roness, 1997). Extending the model would require including "significant elements of structure that are absent from most discussions of the model in theoretical literature" (ibid).

Although a source of inspiration for many scholars, the GCM is also "a solution that still attracts problems" (Cohen, March, & Olsen, 2015, p. 19) and it has been criticized from different angles. My discussion of the critique is delineated to points that are relevant for the adjustments and amendments that I make when applying the ideas of GCM on the field of crisis management.[8] One line of critique concerns how the "relatively independent" (Cohen et al., 1972, p. 3) four streams are related given that the authors at the same time write that "problems and solutions are dumped by participants" (ibid, p. 2). Bendor et al. (2001, p. 172) pinpoint that this implies that "people are the carriers of problems and solutions". How can then the streams of solutions and problems be

[8] For discussions of the GCM, see e.g. (Jann, 2015; Lomi & Harrison, 2015; Moch & Pondy, 1977; Padgett, 2013; Perrow, 1977).

independent of the people who carry them? A possible response regarding problems is that their origin is exogenous, i.e. stems from the environment, even though it is participants who "dump" them in garbage can decision-making processes.[9] Solutions may also have an exogenous origin. For instance, there may be a policy solution developed by another organization that one of the participants brings with him and dumps in a garbage can. But the solutions may also have been developed by participants within the organization in question. In any event, solutions are developed by people. Thus, it is difficult to see how the streams of solutions are independent of the streams of participants.

Bendor et al. also argue that solutions cannot be independent of problems if we are to understand the concepts the way they are commonly used and understood. They illustrate their argument by citing *Webster's Collegiate Dictionary*, which defines solution as "an action or process of solving a problem" (cited in Bendor, Moe, & Shotts, 2001, p. 172). Bendor et al. conclude that solutions as defined in GCM, somebody's product, must refer to something else than what solution refers to in ordinary language. In a response, Olsen acknowledge that "in its 'purest' form" GCM assumes the four streams are "independent, exogenous, streams flowing through a system". Yet, Olsen argues, "a number of garbage can models exist, and these variations modify most of the key assumptions of the 'pure' model" (J. P. Olsen, 2001, pp. 191–192). I concur with Bendor et al.'s critique of the stream of solutions as conceptually confusing and not very fruitful for analytical purposes. Instead of talking about independent streams of "solutions" I talk about "actions", and the actions are not conceptualized as independent streams but exerted by people at a specific point in time. I return to this below, but first I briefly outline the basic ideas of the other source of inspiration for my streams framework, the policy streams framework by Kingdon.

[9] To be sure, the origin of problems can also be endogenous, originating from within the organization in question. For instance, turbulence in an organization can have both endogenous and exogenous causes (cf. Ansell, Trondal, & Øgård, 2016). As this thesis focuses on crises triggered by an exogenous mechanism I do not discuss this point further.

Policy streams

The policy streams framework (PSF) as outlined by Kingdon (1984) drew inspiration from the GCM and was developed to explain when and why policy change occurs. According to Kingdon (1984), a prominent reason why it has proved so difficult to make policy changes is because policy change is only possible when three independent "streams" coincide in a "window of opportunity". Such policy windows occur when there is heightened attention to the problem that needs to be solved – the problem stream; there exists a solution that is available and feasible – the policy stream, and there is a motive to select one of the available solutions – the politics stream (Kingdon, 1984).

Inspired by the GCM, Kingdon identified several features that are characteristic of any policy process. I will focus on four of these. First, the competition for attention: few policy problems reach the top of the policy agenda.[10] Second, selection processes are often imperfect because it is difficult to gather new information and this can also be subject to manipulation. Third, actors have limited time to make their choices, which forces them to make a choice before their preferences are clear (Cairney & Jones, 2016, p. 39). Fourth, in contrast to the GCM, Kingdon gives the individuals a potentially pivotal role because they can act as "policy entrepreneurs", which are often necessary "to deal with the disconnect between lurching attention and slow policy development" (Cairney & Jones, 2016, p. 40). The policy entrepreneurs do this by developing solutions to anticipated future problems and looking for the right moment to attract attention to their solution via a problem that is high on the agenda (Kingdon, 1984, pp. 188–193).

I would argue the aforementioned features also are characteristic of the field of crisis management and crisis coordination, albeit in a somewhat different form. Crises construed as "focusing events" (Birkland, 1997; cf. Kingdon, 1984) can affect the competition for attention by causing a policy problem to come higher on the political agenda than it usually is. The competition for attention

[10] Attention as a scarce resource and the dynamics of attention shifts was a core element in the original GCM article, and in subsequent, elaborated versions of the model (cf. March & Olsen, 1976, Chapter 3, 1986, pp. 20–21).

also comes into play at the micro-level during crisis responses. There is a surge of problems that need to be handled, but due to the time pressure and the cognitive limitations of humans, cf. bounded rationality (Simon, 1997), those involved in the crisis response can only focus their attention on one or a few problems at the time. Also, the crisis can develop in unexpected ways and the advent of new problems can result in abrupt attention shifts. Moreover, new information in the initial stages of a crisis is often unverified and sometimes in conflict with other available information. Thus, actions taken during crisis responses are taken under pervasive uncertainty (Ansell et al., 2010).

The notion of the policy entrepreneur is transferable to the realm of crisis coordination in at least two ways. First, crisis coordination as I define it hinges on someone taking directive action to enable coordination (cf. Boin & Bynander, 2015). Thus, akin to how it is pivotal for the policy entrepreneur to anticipate the right time to attract attention to her/his solution in order to succeed in enabling policy change, the outcome of crisis responses hinges inter alia on those in command (or someone else) ordering mobilization of relevant and sufficient capacities at the appropriate time. Second, construing the policy entrepreneur as innovative and creative, entrepreneurial thinking is also necessary in crisis settings because there is often a need for improvisation. For example, Weick (1993, p. 639) talks about the importance of "bricoleurs" in crisis responses, people who are "able to create order out of whatever materials [they have] at hand".

Applying the garbage can and "windows of opportunity": information couplings and directive actions

The multiple streams framework I develop can be seen as an example of Olsen's (2001) call to play with the basic ideas of GCM, March and Olsen's call for extending the applicability of the model by including "significant elements of structure" and at the same time avoid some of the critique by Bendor et al. (2001). Moreover, according to Padgett, the trend in recent works building on GCM is a drift towards computer simulations contrast, and a tendency "to prefer to isolate and study specific mechanisms rather than to revel in their collective interaction and cacophony" (Padgett, 2013, p. 473). With my streams framework

I lean towards the latter by taking an interest in how the interaction of the streams are conditioned by the organizational and institutional setting in which they interact. What I derive from both frameworks (GCM and PSF) is the emphasis on time as timing as an important locus, the notion of various streams interacting, and that how the streams interact affect the subsequent phases of the process, in my case the subsequent crisis coordination.

Akin to the window of opportunity argument by Kingdon, arguing policy change hinges on three streams coinciding, I argue crisis coordination hinges on information-coupling and directive action. First, someone has to become aware that there has been an incident. I conceptualize this as an instance of *information-coupling*, i.e. information being coupled to person(s). Second, someone has to take directive action to mobilize and dispatch capacities to handle the problem. Akin to the policy entrepreneur who "provide[s] the knowledge and tenacity to help couple the 'streams'" (Cairney & Jones, 2016, p. 41), those taking directive action to enable crisis coordination draw on pre-existing crisis coordination structures and practices when deciding whether (and when) to mobilize and dispatch capacities to handle the problem.

I conceptualize crisis coordination as consisting of three streams: problems, capacities and information. Problems are any issues that fall under the jurisdiction of the respective organizations. I conceptualize a crisis incident as one problem, which analytically can be divided into a set of sub-problems. Capacities refer to all personnel, means of transport and tools and gear the organizations have available at their disposal and thus in principle can mobilize. Information streams refer to all information being received, sent and shared in organizations. When talking about information streams and information-couplings I talk about one delineated part of communication: processes of information sharing. There are streams of information *passing* streams of people (people and personnel are used interchangeably in my presentation of the framework). Sometimes the information gets coupled with people, sometimes not. In crisis settings characterized by urgency and uncertainty, often causing stress, and where attention is a scarce resource, information sharing is precarious. Personnel can have two functions in my framework, they can be capacities and

they can be actors. In the latter case, as actors they can send and receive information and they take actions.

Three of the four streams in the original GCM – participants, solutions and choice opportunities – are reformulated and conceptualized differently in my streams framework. "Participants" is reformulated to "capacities" to include other types of capacities than personnel (participants) such as means of transport because they may play a pivotal role in crisis coordination.

The underlying idea of the framework is that when problems occur, capacities are needed to handle the problems. But to become aware of the problem and the need to mobilize capacities the personnel (as actors) are dependent on getting information about the problem (information-coupling). Moreover, the personnel (as actors) dispatched to handle the problem are dependent on information and capacities to locate each other, coordinate and find out how to handle the problem. I do not perceive their handling of the problem as an independent stream akin to the "solutions" in the GCM, cf. the critique by Bendor et al. Instead, the handling of a problem is perceived as an on-going process, which consists of the actions and interactions taken by the personnel (as actors) coupled to the problem.

For the purposes of this thesis I find it analytically more fruitful to talk about actions than "choice opportunities". Choice opportunities occur when the three other streams coincide in a "garbage can". Thus, the choice opportunities have, as I construe it, an ephemeral existence, they occur when the three streams coincide and cease to exist when the three streams no longer are coupled together, akin to Kingdon's policy-windows. I therefore perceive the choice opportunities in GCM not as an independent stream, but something that occurs at a particular point in time. In the multiple streams framework, I talk about actions (and directive actions) rather than choice opportunities. This is because the pervasive urgency in crisis settings leaves little time to reflect on different possible choices before taking action. Thus, most actions are based on thinking fast, not slow (cf. Kahneman, 2011), i.e. actions are typically based on intuition, rather than reflection and reasoning.

The information stream is new in my framework compared to GCM and PSF, and refers to information about problems and information about capacities. By including the information stream, I put emphasis on the meaning dimension of crisis coordination. Information goes through processes of encoding and decoding when passing through the network of personnel and organizations involved in the crisis response. Senders encode their information into messages to make the information meaningful for the recipients, while the recipients decode the messages, and interpret the meaning of the message.

To be sure, the information stream is not fully independent of the two other types of streams. People (as actors) often send their messages through a channel aided by some device such as telephones, radios and computers. Moreover, messages can be registered and stored on a device independently of any human involvement. In other words, information streams can go via different types of capacities.

The information stream is not fully independent of the stream of problems either because information streams may entail information about a problem. But receiving information about a problem, does not automatically couple the recipient with the problem as I conceptualize it. This can be illustrated with an example. If the commander in a first responder organization receives information about a problem, the commander has to decide whether to engage (take directive action) or not. If the commander chooses the former, the capacities dispatched to handle the problem are coupled with the problem (problem-coupling). In this sense, information streams containing information about a problem are independent of the problem stream. Simply receiving information about a problem does not automatically couple the recipient with the problem. It also requires decisive action. The more general point is that even though the information stream is not strictly speaking fully independent of either of the two other streams, I treat it as a separate stream, because I find it analytically and conceptually more meaningful.

In the subsequent three sections I elaborate the notion of my streams framework. I theorize when, how and why directive action to bring about crisis coordination (2.6.2); and, information sharing and information-couplings

(2.6.3); is likely to occur and not in crisis settings. Then I build on the literature on collective sense-making in crisis to conceptualize how the responders try to enact a shared situational awareness based on the information that is shared (2.6.4).

2.6.2 Directive actions to bring about crisis coordination

As already pointed out, directive action is a necessary condition for crisis coordination. Before any coordination can take place, someone has to mobilize and dispatch capacities to handle the crisis. Directive actions are not conceptualized as an independent stream, but as human action that may or may not happen when becoming aware that there is a problem that needs to be handled. This can be done by those who are formally, or de facto, in command, or the personnel may mobilize on their own initiative (self-organizing). I discuss some potential challenges affecting the likelihood of directive action by command being taken, and whether self-organizing is a viable solution to these challenges.

Based on the design perspective, directive actions will normally be taken by those in command. However, an implicit assumption is that those in command have an accurate and updated understanding of what is going on, which is a severe challenge in the initial phase of crises (Snowden & Boone, 2007). The pervasive uncertainty combined with the need for swift action makes it difficult for those in command to time when to mobilize and to set the appropriate level of mobilizing. Furthermore, those in command may be temporarily decoupled from the action: for instance because it can take time before updated information reaches the higher echelons in the organization (Boin & Renaud, 2013), or they have to change facilities because their current facilities were disrupted by the crisis (Kendra & Wachtendorf, 2003).

If those in command are proactive and take immediate directive action, this increases the likelihood of a swift response, but it is not a sufficient condition. Swift mobilization also hinges on the reachability of relevant capacities. If the capacities are hard to reach it will by definition take time to mobilize and dispatch them. How reachable capacities are is ultimately a result of political priorities, because making capacities reachable costs money, for

instance having capacities operative 24-7 or having specialized capacities scattered at many geographical locations.

The channels for information sharing may also be disrupted. Disrupted channels due to the magnitude of the crisis is a prevalent feature of crisis settings (Bharosa, Lee, & Janssen, 2010; Sellnow & Seeger, 2013). Also, it is often difficult to establish contact via the channels they normally use because of increased traffic, more people communicating and more information streams. When such situations occur, it is reasonable to believe those in command will use any other channels they have available. If no channels for information sharing are available those in command are temporarily decoupled from the operations and others have to step in to fill the void in the command structure.

The negative consequences of disrupted command structures and channels for information sharing can be mitigated by building cross-member expertise, collective knowledge, and by building skills in improvisation and bricolage, (cf. 2.5). Such measures make others involved in the crisis response more likely to fill the temporary void in the command structure by shifting roles temporarily and taking the command (Bechky & Okhuysen, 2011).

One suggested solution to the aforementioned problems is so-called self-organizing, which echoes the basic ideas of the emergence perspective. Disaster researchers have found civilians, emergent response groups and local organizations to be adaptive and capable of creating nodes of cooperation, despite lacking pre-existing structures such as group membership, tasks and roles (Boin, Kuipers, & Overdijk, 2013, p. 84; Majchrzak et al., 2007, p. 147; see also Rodriguez et al., 2007). In a similar vein, Weick et al. (1999) talk about epistemic networks[11] as a "form of resilience [that] materializes when events get outside of normal operational boundaries and knowledgeable people *self organize* into ad hoc networks to provide expert problem solving" (Weick et al., 1999, p. 47, emphasis by author; see also Hutchins, 1995, Chapter 8; Kendra & Wachtendorf, 2003). Weick et al. (1999, p. 47) assert that "[t]he value of these networks is that they allow for rapid pooling of cognitive knowledge to handle events that were

[11] The notion of "epistemic networks" Weick draws from Rochlin's (1989) research on aircraft carriers.

impossible to anticipate". Somewhat similar ideas can be found in the literature on high reliability organizations. This literature emphasizes the importance of decentralized decision-making understood as organizing around expertise and trusting subordinates to take actions when necessary. Decentralized decision-making is fruitful because the subordinates exhibit relevant expertise and are capable of taking necessary actions (Roe & Schulman, 2008; Weick & Sutcliffe, 2011).

Self-organization and decentralized decision-making may counter some of the problems related to disrupted channels and command structures. However, one limitation in the aforementioned literatures is that they presuppose that the subjects (civilians, emergent response groups, epistemic networks, subordinate experts) are already coupled with the problem. In contrast, I am discussing the processes *prior* to being coupled with the problem – there is no problem-coupling if no one takes directive action.

2.6.3 Information sharing: Semi-structured information-streams and Information-couplings

I now turn to the issue of information sharing and information-couplings in crisis settings. As already argued, information-coupling is a necessary condition for crisis coordination. Someone has to become aware that an incident has occurred before any directive actions can be taken to bring about crisis coordination. Information sharing is also an important precursor for efforts to create and maintain some level of shared situational awareness in crisis coordination processes (elaborated in the next section, 2.6.4).

Crucial factors for the effectiveness of information sharing are to what extent the recipients have received and registered the disseminated information, and whether the information has been directed to the right recipients. I have introduced information-couplings as an analytical concept to conceptualize the effectiveness of information sharing processes in crisis responses.

I perceive information sharing in crisis settings as semi-structured processes. Structured because information sharing processes are conditioned by pre-existing structures and practices. Semi-structured because crisis settings are volatile, structures may get disrupted and the development of the crisis response

may take unexpected turns. In the following, I theorize when, where, how and why information-couplings are likely to occur in a crisis setting. I outline the role of organizations' information processing capacity. Then I focus on how pre-existing structures and practices and developments in the crisis response are likely to affect which *direction*(s) the streams of information take, who has *access* to the information streams and how people in the police organization *search* for information of potential relevance.

Information processing capacity

The information processing capacity has a material and an organizational component. The former concerns the characteristics of the channels on which information is distributed, while the latter can be linked to the design and evolutionary practices perspectives respectively. The organizational and material components are necessary, insufficient conditions to increase information processing capacity of the organizations and network as such.

The material component is twofold. Firstly, the number of channels available for the respective organizational members in the emergency response network to distribute messages, e.g. phone, radio, operative log-systems, email. Furthermore, how many lines are materially possible within the respective channels. For example, how many desks does the operations center have to handle incoming calls, how many frequencies can their radio communication system operate on simultaneously, or how many can be logged on the operative log-systems simultaneously. Secondly, what is the robustness and coverage of the respective channels. For example, how far-reaching the channels are (coverage) and how prone they are to noise and distortion (robustness). Furthermore, how many streams of information can the channels handle simultaneously without any negative effects, e.g. how many pending incoming calls can the phone line have, how many emails can be distributed simultaneously, how many can operate on the radio communication simultaneously and so on.

The organizational component of the information processing capacity is also twofold. The first point concerns the organizational design of the information nodes in the crisis response network. That the channels these units

operate have high capacity has limited effect if it is not accompanied by sufficient staffing to operate the number of lines in the respective channels. For example, if a first responder organization increases the number of telephone desks at its operations center from two to four, this has little effect if the number of staff to operate the telephone desks remains unchanged.

Regarding the organization of work, the central question is whether those operating and monitoring the telephone desks (or any other communication channel) have this as their single task or if they have other tasks to attend to as well. More generally formulated, it is the question of how attention is structured and organized (cf. March & Olsen, 1976, Chapter 3). A central aspect is whether the organization has a "plan B" to resort to if there is a surge in incoming information, which puts pressure on current structures and the way they organize their work.

The second point related to the organizational component concerns the evolutionary practices. The encoding and decoding processes are social processes. For the sender, it is about making messages that are meaningful for the recipient (encoding). For the recipient(s), it is about making sense of these messages (decoding). As proponents of an evolutionary practice perspective have argued, these processes are extra demanding in disruptive, unexpected settings, which makes it hard to grasp "what is the story here?" (cf. Weick et al., 2005, p. 410). Although technological development has increased the number of ways information can be encoded into messages and subsequently sent, it is ultimately people who have to decode the messages, cope with the situation and take action (Quarantelli, 1997, pp. 97–98). Thus, whether, and how tightly, information will be coupled with people in crisis settings, hinges on how much common reference points and collective knowledge the sender and recipient have to draw on. The more collective knowledge they have, the more likely it is the sender will encode a message that is easily understandable to the recipient and thus more likely that the recipient will grasp what the "story" is.

From this, it follows that a relevant question is to what extent the organizations have made efforts to build common knowledge across the different

hierarchical levels and between the different organizational units, e.g. between different geographical units and between the national, regional and local level.

The direction of the information streams

I argue senders[12] of messages are likely to direct their messages to someone that is in proximity of themselves. I distinguish between three types of proximity: formal, informal and material.

Formal proximity builds on the design perspective and refers simply to the one(s) the information is supposed to be sent to according to existing formal structures (plans, rules, standard operating procedures). These structures inform the organizational members on how different types of problems are handled, including who does what, how and when (Allison, 1969, pp. 698–699; Gersick & Hackman, 1990, p. 71), and thus give the senders guidance on where to direct their messages. Messages directed towards those in formal proximity would be examples of routinized actions. If this option is unavailable, I expect the sender to direct its message to the formal, or ad hoc, substitute for those in formal proximity, which would be examples of contingent actions (cf. typology in 2.3.5).

Due to characteristics of the particular crisis setting, those in formal proximity may be out of reach, cf. the emergence perspective. In such situations, I hypothesize it is likely the sender would direct the message to someone in informal and/or material proximity. By informal proximity I mean someone the sender has an informal relation to, i.e. their relation does not stem from their current formal roles but an informal social relation (e.g. former colleagues or friends from studies). By material proximity I mean someone who happens to be physically reachable for the sender at the time he/she needs to forward the message. A necessary condition is that the sender believes the person in informal and/or material proximity can help in forwarding the message to the

[12] I focus here on senders who are human beings. Material artifacts can also be senders of information, e.g. a fire detector sends an alarm signal to a control center. When material artifacts are senders of messages, I conceptualize the direction of the message as pre-programmed. If the message takes other direction(s) than the pre-programmed direction(s), it is due to technical malfunctioning, and hard to predict which direction that would be.

person/organizational unit that is formally most proximate or can function as an *ad hoc* substitute for the person/organizational unit most formally proximate. Directing the message to someone in informal or material proximity would be examples of adaptive improvisation.

Access, attention and search

I now turn to the recipients and potential recipients, i.e. the people who may get coupled with the information streams. I briefly pinpoint three factors likely to affect whether potential recipients will be coupled with the information or not: who can access the information streams, where potential recipients direct their attention, and where they are likely to search for information.

Access to the information streams is a necessary, insufficient condition to be coupled with them. That access is an insufficient condition is especially evident when the information streams do not have a designated recipient. For example, an operator at an operations center may have decoded an incoming message he received and registered the decoded message in their internal log-system, where anyone who can access the log-system in principle can get coupled with the message. Another example is messages communicated on their designated radio frequency with no assigned recipient.

The take-away from these examples is that whether potential recipients get coupled to information streams also hinges on where they direct their attention. How the division of work is organized affect where organizational members direct their attention (March & Olsen, 1976, Chapter 3). For example, if potential recipients are assigned to handle other tasks, in addition to monitoring and operating one communication channel (e.g. radio, log-system), it is more likely they will be less attentive to the channel where the message is sent and thus less likely to get coupled with it (cf. March & Olsen, 1986, pp. 20–21). Thus, the more tasks a person is assigned to, the less likely the person is to get tightly coupled with information streams that are passing.

A related, but more general point, demonstrated by cognitive psychologists, is that humans' cognitive capacity deteriorates when put in a crisis situation, inter alia because such incidents are experienced as stressful (Staw et al., 1981; Sutcliffe & Weick, 2008). Individuals put under stress are less likely

to identify and discriminate unfamiliar stimuli compared with individuals in a non-stress situation. Crisis settings typically trigger unfamiliar stimuli because they by definition are rare and come unexpectedly. Moreover, stress increases the rigidity in perception and in problem solving. Consequently, people in crisis settings are likely to get coupled with less of the information streams passing than they would under normal conditions, due to the cognitive constraints of human capacity.

Finally, organizational units distanced from the incident scene(s) will have little information on what is going on in the initial phase of a crisis because they do not have direct access to the incident scene(s). Moreover, the encoding-decoding processes are time-demanding, which is why the higher echelons of first responder organizations have limited information on "what's the story" in the initial phase of crises (cf. Boin & Renaud, 2013). The higher echelons of the organization may then start to search for relevant information on what is going on. It is reasonable to believe they will start their search at organizational units they expect have direct or indirect access to the incident scene(s).

2.6.4 Enacting a shared situational awareness

Sharing information to get those involved coupled with relevant information is important to create some level of shared situational awareness, but the responders also have to interpret the information that is being shared. These are social processes of making sense of what is going on and what needs to be done during the crisis response, also known as collective sense-making, i.e. the social processes that occur between those who are coupled to a specific problem "as meaning is negotiated, contested, and mutually co-constructed" (Maitlis & Christianson, 2014, p. 66). I define shared situational awareness as shared and accurate[13] awareness of what is going on, who is doing what and what will be done next by whom, when and how in the subsequent steps.

The enacted situational awareness at one point in time may to a little or large extent be shared by the people involved in the crisis coordination. Thus,

[13] I do not mean accurate in a strict sense, i.e. all perceptions on the situation have to be fully accurate. Rather, it is to emphasize that shared awareness alone is an insufficient condition and is misleading when it is inaccurate.

the process of establishing and maintaining a shared situational awareness is an interdependent two-step process (cf. Weick, 1988). The point is that when taking action, the responders actively affect the further development and structure of the crisis coordination process, and the trajectory of the crisis response more generally. They are moving forward yet always to some degree dependent upon the past, which informs the present and the future.

Barriers to enacting shared situational awareness

Enacting shared situational awareness between those who are coupled to a crisis is a prevalent challenge due to the defining characteristics of crisis incidents: urgency, uncertainty and disruptiveness. The more frequently and variously the personnel have exercised and practiced crisis responses, the more likely it is they will enact coordination actions that are performance-relevant (cf. 2.5.3). Building skills in improvisation and bricolage will enhance the individuals' "generation of role improvisations" (Weick, 1993, p. 640). Hence, the individuals will have a broader repertoire of frames to draw from if novelties in the crisis make pre-existing structures and practices inadequate. Furthermore, collective knowledge can compensate for structures that have been disrupted because those involved will exhibit some common ground prior to the involvement in the particular crisis response. They may share knowledge on each other's roles, tasks and competences, making them more adaptive to any disruptions in the structures (Bechky & Okhuysen, 2011; Rantatalo, 2013).

In the event of an actual crisis it is likely that those operating on the ground at the incident scene and those at the higher echelons in the respective organizations will operate in different "time zones" in the initial phase (cf. Boin & Renaud, 2013). This is because the responders on the ground can directly observe what is going on while those higher up in the hierarchy are dependent on information from their subordinates. It often takes time before those higher up in the hierarchy receive reliable, verified information of what is going on. This can have a multiplicity of reasons (Bharosa et al., 2010; Boin et al., 2019; Kendra & Wachtendorf, 2003; Quarantelli, 1988; Sutcliffe & Weick, 2008). For starters, if the message has to go via several organizational units, or hierarchical levels from its sender to its end recipient this will take time. Moreover, those on

the ground are themselves struggling to make sense of what is going on, they are overloaded with tasks that require their attention. Furthermore, communication channels and command structures may have been disrupted by the crisis.

In an actual crisis, the responders may enhance their level of shared situational awareness by explicating their collective sense-making processes. The point is threefold. First, responders should report honestly even if their statement may be in conflict with earlier statements (cf. Weick, 1993), because reporting honestly may induce important corrections to the on-going collective sense-making. This point is corroborated by the well-established finding in the crisis and disaster literature that trust is an important success factor for the quality of crisis coordination (Boin & 't Hart, 2012; Quarantelli, 1988).

Second, the shared information should be made usable by developing actionable knowledge, i.e. knowledge that "leads to immediate progress on a current task or assignment" (Cross & Sproull, 2004, p. 446, cited in Wolbers & Boersma, 2013, p. 196). Essentially, making knowledge actionable is about addressing the implications of the information that is being shared to the recipient, for instance what to do with the information.

Third, when sharing information, the sender should give time for the recipient(s) to formulate explicitly how they decode the shared information. In doing so the senders and recipients are more likely to detect differences in their interpretations, which reduces the risk of misunderstandings and diverging situational understandings. Still, time is a limited resource in crisis responses and the need for explicating and calibrating each other's interpretations of shared information must be balanced against the need for swift actions (cf. Wolbers & Boersma, 2013, pp. 196–197). The need to explicate collective sense-making processes is negatively correlated with pre-existing collective knowledge. The more pre-existing collective knowledge and common ground the responders have, the less is the need to explicate their interpretations because they use the same codes and concepts, have the same standard operating procedures and so on.

2.7 Expectations

I end this chapter by deriving a series of expectations on what type of crisis coordination patterns and dynamics we can expect based on the multiple streams framework. A general argument of the multiple streams framework I have outlined is that in-crisis coordination is conditioned by pre-crisis coordination. Building crisis coordination capacities is about organizational design *and* evolutionary practices (cf. 2.3). Moreover, it is largely a question of trade-offs: such as specialization versus coordination, between different types of specialization or prioritizing of resources between urgency issues and other tasks within the police.

How in-crisis coordination actually happens in particular crises is a result of both pre-crisis coordination capacities and in-crisis features. The aim with the expectations is to specify how the theoretical notions and reasoning in the multiple streams framework can enhance our understanding of, and help explain, the empirical patterns I observe in the Norwegian police crisis coordination on 22/7.

Following the structure of the previous sub-chapter the expectations are grouped in three categories: directive actions (to bring about crisis coordination), information sharing and shared situational awareness. I distinguish between expectations based on pre-crisis coordination capacities and expectations based on in-crisis features. But first I outline some general expectations on the relevance of the environment the first responder organizations operate in, and I explain briefly why I expect that effects of geographical and functional specialization are likely to affect crisis coordination in response to predatory crises.

Building on historical institutionalism and its notion of path-dependence, and my related argument that the history-dimension of time is important to understand in-crisis coordination, I expect that the leeway for first responder organizations to reinforce their crisis preparedness and coordination capacities are conditioned by the environment they operate in. More specifically, I expect that the more disruptive crises in the past, the more likely it is that crisis preparedness has come on the political agenda and thus the more likely it is that

the first responder organizations have had opportunities to reinforce their crisis preparedness and coordination capacities.

Predatory crises are transboundary crises (Ansell et al., 2010; Boin, 2018). First, predatory crises as I conceptualize them pose a regional or national security threat, which implies that the crisis crosses the boundaries of the local jurisdictions. Thus, the crisis necessitates vertical coordination across different levels of government. Second, predatory crises trigger a risk that more incidents will occur. Moreover, no one knows at the time where a potential second incident might occur, and it is therefore necessary to mobilize capacities in a large area. In this sense, predatory crises cross geographically bounded jurisdictions and necessitates horizontal coordination across local jurisdictions, for instance between local Fire and Rescue services, between local police districts and so on. Third, predatory crises are likely to trigger a need for involvement by many first responder organizations. For instance, the Fire and Rescue Services and ambulance services for search and rescue, the police for securing relevant areas and locating the perpetrator(s), traffic services to redirect traffic and so on. Thus, predatory crises trigger a need for coordination across functional boundaries. In sum, predatory crises cross geographical and functional boundaries, both horizontally and vertically. Therefore, it is likely that how the organizations involved are organized in terms of geographical and functional specialization will have an effect on the crisis coordination.

2.7.1 Directive actions

In the following I derive two expectations on how directive actions to bring about crisis coordination are likely to be affected by pre-crisis coordination capacities.

First, I expect that excessive overlaps in the geographical or functional specialization of the first responder organizations involved in a crisis (cf. design perspective) can create confusion and uncertainty on whose responsibility it is to take the command and bring about a coordinated crisis response. Or, the organizations may simply assume that someone else will take the command. In any event, if one of the two sketched scenarios emerge, I expect that the crisis response will be reactive. The organizations can mitigate the risk of confusion and uncertainty by practicing frequently on the division of work in different

crisis scenarios, either through real incidents or training and exercises (cf. evolutionary practice perspective).

Second, I expect that any underlap in the geographical or functional specialization of the first responder organizations involved in a crisis (cf. design perspective) will result in either unawareness of the problem that needs to be handled because no one has it as their primary responsibility, or uncertainty on who should take the lead because no one has the problem as their primary responsibility. In any event, I expect that underlap in the functional specialization will cause a reactive response by the first responder organizations. The risk of underlap is inevitable, because from time to time we face novel problems that go beyond our imagination (Taleb, 2010; Turner, 1978). However, I expect that the risk of underlap is reduced by training on a broad variety of crisis scenarios.

2.7.2 Information sharing

In the following I derive four expectations on how information sharing in crisis coordination is likely to be affected by pre-crisis coordination capacities (the first two expectations) and in-crisis features (the latter two expectations) respectively.

First, I expect that the more jointly standardized the guidelines and technology for information sharing is across the geographical and functional boundaries of the first responder organizations involved, the easier it will be to share information swiftly.

Second, I expect that the higher the information processing capacity (IPC) in the organization, or network of organizations, the more information-couplings will occur. There are three necessary conditions that jointly result in enhanced information processing capacity. The three conditions are: i) Increasing the number of lines on each channel for information sharing (cf. design perspective); ii) increasing the level of staffing at the information nodes (cf. design perspective); iii) providing the staff at the information nodes with adequate training (cf. evolutionary practice perspective). If all three conditions are fulfilled, this will enhance the IPC of the first responder organization.

Third, I expect that those who get coupled with information streams are those who have access to the streams and have sufficient attention directed

towards the channel when the information passes. Again, the role of time as timing is emphasized and the importance of attention.

Fourth, the more formally distanced a person, or organizational unit, is from the incident scene(s), the longer it will take to get coupled with information on what is going on. This expectation can be linked to time as urgency, and also pinpoint that it may take time before information is coupled with the appropriate people.

2.7.3 Shared situational awareness

In the following I derive two expectations on how efforts to establish and maintain a shared situational awareness across geographical and functional boundaries in crisis coordination is likely to be affected by pre-crisis coordination capacities (the first expectation) and in-crisis features (the latter expectation) respectively.

First, I expect that the efforts to establish shared situational awareness across geographical and functional boundaries are conditioned by the organizations' level of collective knowledge. The more collective knowledge the organizations have, the easier it will be to establish some level of shared situational awareness of what is going on and who will do what.

Second, building on the sense-making in crisis literature I expect that the more explicit the collective sense-making processes are, the more likely it is the responders will develop a high level of shared situational awareness. The collective sense-making processes are made explicit by reporting honestly, making knowledge actionable and giving time for recipients of information to explicate their decoding to the others who are involved.

3 Research Design, Methods and Data Analysis

3.1 Introduction

In this chapter I outline my single case study research design and my two-pronged approach that combines within-case analysis (process tracing) and counterfactual analysis (3.2). I describe the qualitative methods I have employed, and the data sources collected and analyzed in this thesis (3.3). Assessments of strengths and weaknesses of reliability and validity are done consecutively. I end the chapter by making a few notes on research ethics.

3.2 Research design

3.2.1 Case study design and philosophy of science

Ontological preconceptions cannot, at least not in a strict sense, be proved or disproved, because ontology is about how the world really is, independent of our experiences of it. Still, it is important to be transparent on what ontological (and epistemological) preconceptions this thesis rests on, because, to paraphrase Gerring, what I find in this thesis is contingent upon what I look for, and what I look for is to some extent contingent upon what I expect to find (Gerring, 2004, p. 351), and what conceptual and methodological tools I employ.

The scientific prospects of case study design has been a contested issue in the social science methodology literature, where comparative designs or statistical analysis have typically been seen as preferable approaches to gain insight into the social world (Lijphart, 1971; Mahoney, 2010). Criticism of the case study design has typically hinged upon whether it is possible to gain insights into causal relations from the study of a single case (i.e. without systematic comparison)(Flyvbjerg, 2006; Flyvbjerg, Landman, & Schram, 2012; Geddes, 1990), and whether it is possible to generalize case study findings to a broader population of cases (George & Bennett, 2005; Gerring, 2007; King, Keohane, & Verba, 1994). The former is about the internal validity of case studies and its status, the latter about the external validity.

Case oriented research focuses on mechanism-based explanations, in contrast to population-oriented research that focuses on causal effects.

Developing mechanism-based explanations is about detecting what necessary, sufficient, INUS and NUIS conditions that enabled (or hindered) causal relations in the one or the limited number of cases that is being studied (Mahoney, 2008). An INUS cause "is known to be an *insufficient* but *necessary* part of a condition which is itself *unnecessary* but *sufficient* for the result" (Mackie 1965, p. 265, cited in Mahoney, 2008, p. 418, emphasis in original), while a NUIS cause is "a *sufficient* but *unnecessary* part of a factor that is *insufficient* but *necessary* for an outcome" (ibid). An underlying premise of talking about NUIS and INUS causes is the notion of equifinality, i.e. the idea that multiple causal pathways can produce the same result. The task for case study research is then to detect and examine individual causal pathways yielding a specific outcome in a given case. From this perspective, an advantage of the case study approach is "their ability to accommodate complex causal relations such as equifinality, complex interaction effects, and path dependency" (George & Bennett, 2005, p. 22). All three types of causal relations are prominent in the theoretical framework I outlined in chapter 2. I argued there are two necessary conditions – directive action and information-coupling – that must be fulfilled before crisis coordination can take place. Moreover, I theorized possible mechanisms that can explain how streams of information, personnel and problems interact in crisis coordination and why. Put differently, I theorized mechanisms that can explain the patterns I observe in the empirical material.

Where case studies are able to give plausible causal explanations, do these hold any value beyond the individual case? On this, opinions differ. This thesis is founded on a philosophy of science that presupposes that case study design can provide valid knowledge on causality and give grounds for making causal inferences (e.g. Brady & Collier, 2004; George & Bennett, 2005; Gerring, 2007). It is assumed that it is possible to detect contingent causal mechanisms in human interaction via case studies, presupposed that the tracing of causal mechanisms is sensitive to the local context in the particular cases in which it is operating (Gerring, 2007, pp. 43–48). Mechanisms are understood as "sequences of causally linked events that occur repeatedly in reality if certain conditions are given" (Mayntz, 2004, p. 241).

Furthermore, I adhere to the assumption that the social reality contains regularities that to some extent can be unravelled, that there are sequences of actual events that have the same characteristics. More specifically, that it is possible to provide mechanism-based explanations that go beyond the particular sequence of events under study, i.e. to make causal generalizations about recurrent processes (Elster, 1989; Mayntz, 2004). At the same time, I adhere to the assumption that the external validity of such causal generalizations is limited because at the heart of social science is the study of self-reflecting subjects. Another factor that constrains the possibilities for generalizations is that human interaction takes place in socially organized settings (Vaughan, 1998, p. 31) and the structure of these settings is an emerging product of previous situated actions (Suchman, 2007, p. 84).

But in order to have an informed discussion of whether the theoretical argument presented in this thesis can be applicable to other cases than the single case studied in this thesis it is necessary to clarify what the empirical analysis in this thesis is a case of (George & Bennett, 2005; Gerring, 2004).

3.2.2 A case of what?

This thesis is a single case study where the subject of study is 22/7 delineated to the coordination of the police response, and the object of study is crisis coordination (studied as process) by established first responder organizations and directive actions that bring about such coordination. The distinction between subject and object of study builds on the assertion by Thomas (2011) that case studies comprise two elements: a practical historical unity, which is the *subject* of the study, and an analytical or theoretical frame that is the *object* of the study. Building on this distinction, he defines case study as:

> (…) analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame—an object—within which the study is conducted and which the case illuminates and explicates (Thomas, 2011, p. 514).

Specifying what this thesis is a case of is not straightforward and there is not one definite answer to the question (Ragin, 1992). Still, it is necessary to suggest answers to the question because it is necessary to make reasoned assumptions on the external validity of the empirical evidence of the thesis. Put rhetorically, if the expectations made in chapter 2 are supported by the empirical evidence in this thesis, does that mean the expectations are applicable to all (police) organizations in all countries and their coordination of all types of crises? The answer is evidently no, but could it be that the expectations that are supported by empirical evidence could be applicable to some organizations and their coordination in response to some types of crises? I respond to these questions in a two-step manner by first explaining how I conceptualize 22/7 as a case of a predatory crisis and subsequently explaining how I conceptualize the Norwegian police as a case of an established first responder organization.

22/7: a case of a predatory crisis

Crisis is an ambiguous concept, which encompasses a myriad of incidents. Think for example of: the U.S. housing market that collapsed in 2008, often referred to as a financial crisis; the 2010 volcanic eruptions of Eyjafjallajökull caused what many referred to as an air travel crisis in western and northern Europe; the rise of immigration to Europe in 2015, often referred to as the immigration crisis; the outbreak of the flu pandemic (H1N1) in 2009; or the bombings in Madrid in 2003 and London in 2005. All the aforementioned incidents fulfil the three definitional criteria of crisis – the incidents resulted in a sense of threat and were characterized by uncertainty and urgency. The responses to these crises differ when it comes to which actors were involved and what were considered possible intervention measures.

To enable a more fine-grained understanding of what this thesis is a case of I conceptualize 22/7 as a case of a predatory crisis, which can be defined as incidents caused by *human action on behalf of a non-state actor with the*

intention to harm civilians and causing a security threat.[14] In other words, there are three defining criteria that must be met to qualify as a predatory crisis: i) the incident is triggered by human action executed by a non-state actor (individual, group, organization); ii) the intention is to kill human beings; and, iii) the incident is of such a magnitude that governmental authorities deem the incident as representing a regional or national security threat. Terrorist attacks epitomize the characteristics of predatory crises, but the sub-type also encompasses other types of violent and lethal operations executed by non-state actors. What qualify as terrorist attacks is a contested issue. Moreover, much of the conceptual disagreement on defining terrorism and terrorist attacks is related to what motivates the perpetrators, for instance whether the attack is politically or economically motivated (Ravndal, 2015), which is of minor importance for the police from a crisis management perspective. For these reasons I chose another term than "terrorist attack" for this sub-group of crises.

Moreover, predatory crises can be separated from the sub-types "natural" and "technical" crises.[15] Predatory crises pose distinct challenges to the police compared to the two other sub-types because of their triggering mechanism and what the immediate effects of the crisis are. Predatory crises are triggered by intentional human action, while "natural" crises are triggered by a natural mechanism, i.e. caused by developments and changes in nature (e.g. hurricanes, earthquakes and avalanches), and, "technical" crises are triggered by a technical mechanism, i.e. caused by technological malfunctioning. Human actions may form an integral part of the triggering mechanism in natural and technical crises, but in contrast to predatory crises, the human actions are not enacted with the intention of causing harm.

[14] The concept "predatory crisis" was originally coined by Todd LaPorte (2005, p. 10; cited in Ursacki-Bryant, Smart, & Vertinsky, 2008).

[15] The aim of this simple crisis typology is instrumental, to enable a more rigorous discussion of what this thesis is a case of, and developed by the author. However, the typology draws inspiration from conceptual debates and typologies in the existing literature such as the distinction between natural and man-made disasters, and the critique of this distinction, which among other things point to the role of social-technical systems (e.g. Gundel, 2005; Pearson & Mitroff, 1993; Quarantelli, 1998; Turner, 1978).

Regarding the immediate effects of the crisis, in all three types of crises there is typically an immediate risk permeating the environment that more incidents follow or that the initial incident will "repeat" itself. If there has been an earthquake or an avalanche there is a risk that one instance will be followed by several more. Similarly, when technical crises occur there is an unknown risk that new crisis incidents will occur until the triggering mechanism has been detected. What differentiates the predatory crisis from the two other types is the difficulty of delineating the geographical area that is at risk, i.e. what areas that are at risk of being affected by the crisis incident(s). To be sure, this is also difficult in the aftermath of a natural or technical crisis as well. For instance, how large is the geographical area that is endangered by the occurrence of an emerging flood, a series of forest fires or a technical crisis on a nuclear power plant? The question can be hard to answer for the responders, and the challenge may be further intensified by abrupt changes in the weather conditions. However, I would argue the challenge is significantly bigger in the case of predatory crises. In theory, there are no limits to how far away from the first incident the second incident may occur. If the perpetrators are well organized and coordinated they may strike at multiple locations in a large geographical area. In contrast, for natural and technical crises it is normally possible for the responders to provide a relatively accurate estimate of the geographical area that is endangered by the incident.

The Norwegian police: a case of an established first responder organization

In research design terms I conceptualize the Norwegian police as a case of an established first responder organization, whose involvement in the crisis response represents part of its core tasks; the organization's response operations occur primarily within pre-existing structures (Dynes, 1970). Quintessential examples of established first responder organizations are emergency agencies such as the police, the Fire and Rescue services, and the pre-hospital emergency services.

To be sure, there are significant differences within this population of organizations. For instance, whether they are hierarchically or more network-

organized, what type of core tasks they have in crisis responses, e.g. search and rescue or neutralizing perpetrators, and the frequency of predatory crises in the environment they operate in.

External validity

I conceptualize this thesis as a case study of the coordination by one established first responder organization in response to one predatory crisis. Empirical evidence from this thesis can be of relevance to other established first responder organizations that exhibit characteristics akin to the Norwegian police on central dimensions such as hierarchical command structure, generalist orientation and operation in an environment where the frequency of predatory crises is low.

That being said, I assert that the scope of theoretical framework sketched out in chapter 2 goes beyond organizations akin to the Norwegian police and can be applicable to other types of established first responder organizations as well. However, the assertion is conditional as this thesis only examines one single case. Further single and comparative case studies are needed to provide empirical support (or not) to this assertion.

3.2.3 Units of analysis

The bomb explosion and subsequent shooting massacre, happened in two different police districts – Oslo Police District (*Oslo politidistrikt*) and Nordre Buskerud police district (*Nordre Buskerud politidistrikt*) respectively. Norwegian police districts are expected to handle *all* incidents, including crisis incidents, within own jurisdiction (Politidirektoratet, 2011b). Thus, upon the bomb explosion in Oslo, a key question for adjacent police districts and the police organizations at the national level was: what was going on in Oslo? Next, was the Oslo police capable of handling the unfolding situation on its own? If not, how to offer or send assistance?

The two incidents triggered a surge of incoming information from police personnel and civilians on the ground to the operation centers (OCs) in the Oslo and Nordre Buskerud police in particular, but also in police districts in vicinity of the two incident scenes, as well as the information desks in the police agencies with coordination tasks in the event of a crisis at the national level: Kripos and

the National Police Directorate (*Politidirektoratet*, POD). These units – the operations centers in the police districts and the information desks at Kripos and POD – are the primary units of analysis in this thesis. This is illustrated in figure 3.1 where the red rectangles correspond to the primary units. The red lines are the lines of interaction that is of primary interest: the interactions between the OCs and the Crisis Command Groups (CCG) in the police districts, between these and Kripos and POD at the national level, and between Kripos and POD respectively. I also, to some extent examine the interactions between the OCs and the Incident Commander and other police units at the operative level.

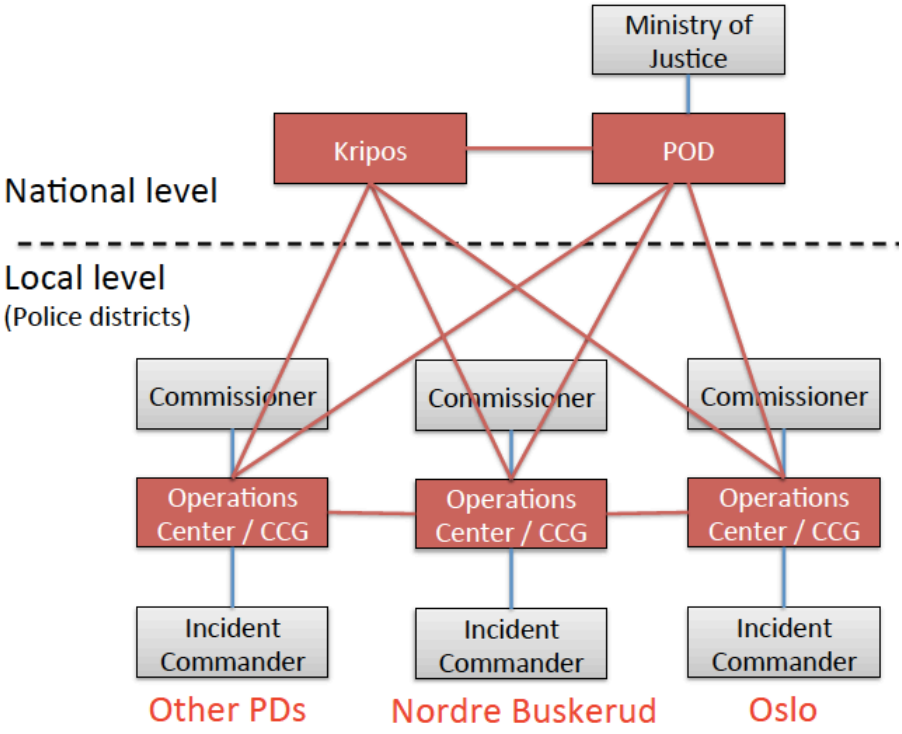

Figure 3.1: Overview of the primary units of analysis.

The primary units of analysis have two functions in common of importance for the scope of this thesis, and which are related to the streams of information, police capacities and problems. They function as information nodes and

mobilizers in the emergency response network. In addition, the OCs in the police districts function as operations coordinators within own police district.

Their function as information nodes is twofold. On the one hand they receive, decode and register the streams of information from police personnel, civilians and personnel from collaborating organizations. On the other hand, depending on their interpretation of the received information, they may forward the received information to other units within own organization, i.e. police district, Kripos or POD respectively, and/or other organizations. Their function as information nodes is crucial for the process of establishing and maintaining a shared situational awareness. Their function as mobilizers pertains to the task of mobilizing more capacities when deemed necessary, either because of a perceived need or having received a request for assistance from another organization. The function of the OCs as operations coordinators pertains to the task of leading on-going, and new, operations, i.e. distributing extant operations to the police units that are on duty, and when necessary, allocating police units between different operations.

3.2.4 Operationalization

In the previous chapter I conceptualized crisis coordination as the interaction of three streams: capacities, information and problems, and argued that information-coupling and directive action are necessary conditions that must be fulfilled before crisis coordination can take place. Moreover, I theorized when, how and why directive actions and information-couplings were likely to occur. More generally, I talk about crisis responses as being more or less coordinated. I now elaborate how I conceptualize and operationalize key concepts to enable a more rigorous and transparent empirical analysis.

The three streams

I conceptualize crisis coordination as consisting of three streams: problems, capacities and information. *Streams of problems* are any issues that fall under the jurisdiction of the respective organizations. I conceptualize a crisis incident as one problem, which analytically can be divided into a set of sub-problems. Applied on the case studied in this thesis there were two crises that occurred: the

bomb explosion in Oslo and the shootings at Utøya. Both incidents triggered a set of sub-problems that needed handling, e.g. search and rescue operations, finding the perpetrator(s) and any accomplices and so on. Not all sub-problems were immediately known, but emerged as the crisis response unfolded. For instance, the police received numerous reports of suspicious objects in downtown Oslo and elsewhere such as Gardermoen airport. Because the police districts are expected to handle all problems within own jurisdiction, including extraordinary incidents, the bomb explosion in Oslo and the shootings at Utøya fell under the jurisdiction of the Oslo police and the Nordre Buskerud police respectively.

Streams of capacities refer to all personnel, means of transport and tools and gear the organizations have available at their disposal and thus in principle can mobilize. The stream-element signal that we are talking about mobile capacities, capacities that can be moved from A to B. Thus, material artefacts and infrastructure that are not mobile such as cellular phone networks and buildings, are not part of the streams of capacities as I define it in this thesis. In the empirical analysis the focus is on police capacities. This can include capacities that normally belong to another organization, but that the police can request to use. A typical example in the Norwegian context is air transport capacities where the police is very dependent on support from the Armed Forces.

Streams of information refer to all information being received, sent and shared in organizations. In the empirical analysis I focus on information that the police received, shared and sent.

Routinized and improvised actions

The operationalization of the typology of coordination actions outlined in 2.3.5 is closely related to how pre-existing structures and practices are conceptualised and operationalized. Pre-existing structures are conceptualised as formal structures that is codified in written documents such as contingency plans and standard operating procedures. Pre-existing practices are conceptualised as practices that have been practiced repeatedly over time and institutionalized into informal normative structures. Pre-existing practices are less tangible than the formal structures that are codified in written documents, and it is therefore more

challenging to demonstrate the existence of pre-existing practices empirically. In this thesis, a pre-existing practice is perceived to have existed when two or more independent data sources describe such a practice and there are no other data in the collected material that conflict with these accounts.

Turning then to the operationalization of routinized and contingent actions and adaptive and creative improvisation respectively. Routinised and contingent actions are operationalised as individual actions and interactions that are in accordance with pre-existing structures or practices. The difference is that contingent actions are in accordance with "alternative" pre-existing structures and practices, that are structures and practices that are expected to be resorted to when the routinized actions prove insufficient.

Adaptive improvisation is operationalised as actions enacted by individuals where they to some extent deviate from the pre-existing structure or practice in order to make the structure or practice appropriate for the crisis setting they are situated in.

Creative improvisation is operationalized as actions enacted by individuals where they clearly deviate from the pre-existing structure or practice. That being said, creative improvisation does not come out of a vacuum assuming improvisation is about reworking and drawing on pre-existing materials, design and capacities. The point is that the action reworks these elements in a novel way that differs significantly from the existing structures and practices. Although the four categories are conceptualised as mutually exclusive, there may be borderline cases where it can be debatable whether an action is to be conceptualized as routinized/contingent or adaptive improvisation, and similarly whether an action is to be conceptualized as adaptive or creative improvisation respectively.

Directive actions and problem-coupling

Directive actions to bring about crisis coordination are about mobilizing and dispatching capacities to handle the crisis. Put differently, directive actions bring about problem-coupling, i.e. capacities are coupled to a problem that needs to be handled. Significant factors for the outcome of the crisis response is how swiftly problem-couplings are brought about and what I call the problem-fit. The latter

refers to whether those coupled with the problem exhibit the appropriate attributes to handle the problem.

I conceptualize directive actions as exhibiting two dimensions: degree of routinization and responsiveness. Degree of routinization pertains to in what extent the action was in accordance with pre-existing structures and practices or based on improvisation. The operationalization of degree of routinization is identical to the descriptive typology of coordination actions outlined in 2.4.5, categorized in four possible values: routinized, contingent, adaptive improvisation and creative improvisation.

The responsiveness dimension of directive action is conceptualized as the function of the scope of, and the speed of, the action. The scope of the (directive) action refers to what types, and total number, of capacities are mobilized and dispatched to be coupled with the problem. The speed of the action refers simply to the time it takes from being informed about the problem and until directive action is taken. Put formally, the time it takes from a person P is informed about problem x until P takes directive action to mobilize capacities to handle problem x. Responsiveness is operationalized in two possible values: proactive and reactive. The values should be understood as extremes along a continuum. The more capacities that are mobilized to handle a problem and the more swiftly these are mobilized, the more proactive is the directive action. It should be emphasized that "proactive" and "reactive" are not by definition positive or negative connotations.

The "reachability" of the police capacities

A crucial factor for how swiftly the police can mobilize and dispatch sufficient police capacities in the event of a crisis is how "reachable" these capacities are. What I call the "reachability" of the police capacities is primarily a question of organizational design, financing and political priorities. The reachability of the police capacities, as I operationalize it, is comprised of three factors: volume, degree of concentration and response time.

The *volume* of the police capacities refers to the total number of police personnel, and how many of these have crisis management-relevant competences. Moreover, how many are on duty throughout the week, and which

organizational units run 24/7. Similarly for transport capacities like cars, boats and helicopters, volume refers to how many transport capacities the police possess and how advanced are they.

The *degree of concentration* of the police capacities refers to the allocation of specialized police personnel and transport capacities between the national and the local level – and their geographical location. These issues are also related to how the police organization is designed in terms of geographical specialization.

The *response time* of the police capacities refers to within what time (if specified in the organizational design) the police capacities have to be operative and ready for action. Many first responder organizations have such defined response times. For example, the police organization may have a pool of specialized police capacities on standby-mode 24/7 with a defined response time in the event of a crisis.

In a narrow sense, all three factors are a simple question of organizational design to be decided by the top leadership in the police, and the leaders in the respective police agencies and police districts. However, increasing the volume of the police capacities and reducing their response time costs money. Deciding on where the available police capacities should be located can be subject to disagreement and conflict. Thus, in a broader sense, all three factors are ultimately questions of prioritization and financing to be made by the leadership in the police, which again may be conditioned by signals and priorities made by the superior governmental bodies.

Information-couplings

I conceptualize information-couplings as exhibiting two dimensions: strength and fit. The strength dimension is operationalized into three possible values: tight, loose and non-coupling. Information-couplings that are tightly coupled refers to instances where the person(s) have received the content of the information stream, decoded it and made it an integral part of their on-going process of making sense of what is going on and enacting their environment. Non-couplings are instances where the person(s) simply do not receive the information, for example due to errors on the transmitter or because their

attention is directed to other tasks – or other information streams. Information-couplings that are loosely coupled are instances where the person(s) notice the information stream, but the information does not manifest itself as an integral part of their on-going efforts to make sense of what is going on.

The fit dimension is operationalized into two values: match and mismatch. In cases of information about a *new* problem, there is a match when the information is coupled with those in command and mismatch when coupled with someone who is not in command. In cases of information related to an existing problem, i.e. some police personnel are already working on handling the problem, there is a match when the information is coupled with police personnel that are involved in handling the problem, and a mismatch when coupled with people who are not involved in handling the problem.

The values of the two dimensions (strength and fit) should be understood as extremes along a continuum, except for non-couplings, which are to be regarded as the negative value of a dichotomous variable: coupled / not coupled. The positive value – coupled – is operationalized into tightly and loosely coupled. Thus, information-couplings will in practice often be somewhere between very tightly and very loosely coupled, and somewhere between a perfect match and a total mismatch. Moreover, these values are not permanent conditions. A non-coupling can change to a loosely or a tightly coupled coupling and vice versa. In a similar vein, an information-coupling that initially was a mismatch can turn into a match at a later point because those coupled with the information are assigned (or take) a different role in the crisis response. Instances when a tightly or loosely coupled information-coupling changes to a non-coupling, is conceptualized as decoupling. The changes can result from human action or from non-human factors. In this sense information-coupling can be understood both as a noun – information-couplings, and a verb – human actions aimed at creating (and maintaining) information-couplings.

Crisis responses as more or less coordinated

A crisis response is coordinated when those coupled with the crisis exhibit the appropriate attributes to handle the problem (problem-fit), they have a high level of shared situational awareness (Weick, 1993) and there is a clear division of

work with limited overlap (Boin et al., 2019, Chapter 4; Drabek, 2007) and no underlap.

The problem-fit is operationalized as a question of to what extent the police capacities coupled with a problem *x* exhibit the appropriate attributes to handle the problem *x*. There is a fit when the police capacities who are coupled with the problem exhibit the appropriate attributes to handle the problem and there is a misfit when they do not. Akin to the fit-dimension of information-coupling the values should be understood as extremes along a continuum. Thus, the problem-fit of the dispatched police capacities will in practice often be somewhere between a perfect fit and a total misfit. Moreover, these values are not permanent conditions. A misfit can change to a fit and vice versa. This point is particular prevalent in the initial phase of crisis coordination when typically, more and more (police) capacities are mobilized and get coupled to the problem(s) that needs to be handled. For practical and pedagogical reasons, I categorize the variable in three values from poor to strong problem-fit.

Shared situational awareness is operationalized as a discrete variable where the two extreme values are optimal and non-existent shared situational awareness. I categorize the variable in three values from high to low level of shared situational awareness. The values high and low level are self-explanatory. The mid-category is labelled average and refers to points in time when those involved have some shared and accurate awareness.

The division of work refers to whether there is overlap and/or underlap in the pending tasks among those who are coupled with the problem. I operationalize division of work as a discrete variable where the two extreme values are clear division, and no division, of work. The higher the number of overlapping tasks and number of tasks left unattended (underlap), the more unclear is the division of work.

3.3 Research methods

The methodology of this study follows from my research questions and theoretical motivation of the study, which is to explore the multidimensional role

of time in crisis coordination. But how can we do this in a rigorous way? This study relies on a two-pronged approach that combines within-case analysis (process tracing) and counterfactual analysis. To answer my research questions, I employ qualitative methods combining analysis of "real-time data", interviews, document studies and field observations.

3.3.1 Data analysis

Process tracing

This study relies heavily on within-case analysis (process tracing), where the aim has been to uncover the interactions between police capacities, problems and information as rigorously, and in as much detail, as possible. Put in process tracing terms, I search for diagnostic pieces of evidence that form parts of a temporal sequence of events. Based on analysis of long causal chains I make causal inferences on mechanisms that significantly affected the crisis coordination by the police on 22/7 (Collier, 2011; George & Bennett, 2005, Chapter 10; Gerring, 2007, Chapter 7).

Process tracing is often used to explain the outcome of a process (see e.g. George & Bennett, 2005, p. 206). In this thesis, however, the dependent variables – directive action and crisis coordination – are (coordination) processes and (directive) actions that bring about those processes. Thus, they are both an intermediate and a dependent variable akin to how Weick conceptualizes enactment as both a process, the action of enactment, and a product – an enacted environment. The process tracing in this thesis is thus intended to capture an enacted environment inhabited by the police in a setting of unexpected crisis. I am accounting for a set of processes and actions, which can be summarized as the actions and interactions exerted by the police personnel examined in this thesis in their efforts to mobilize capacities and coordinate their response to the two terrorist attacks.

I adhere to the following definition of process tracing, "the analysis of evidence on processes, sequences, and conjunctures of events within a case for the purposes of either developing or testing hypotheses about causal mechanisms that might causally explain the case" (Bennett & Checkel, 2014, p. 10). I use the

evidence from my empirical analysis inductively to develop a theoretical argument that can help explain the patterns and dynamics I observe in my empirical material. The theoretical argument was outlined in chapter 2. In the concluding chapter I discuss briefly the prospects of exploring the implications of my theoretical argument in other similar cases.

A central point in the multiple streams framework is that the process I am "tracing", police crisis coordination on 22/7, in reality consists of many processes, of which each consists of interactions between streams of capacities, information and problems. Furthermore, the coordination processes have a sequential logic. How the streams interact at time 1 affects their subsequent interaction at time 2 which again affects their interaction at time 3 and so on (Abbott, 1983). How the interactions of the streams at one point in time affect the subsequent interactions may involve amplifying effects, dampening effects, feedback effects, and diagnostic connections (Bennett & Checkel, 2014, p. 11).

A prospective research strategy

To examine police crisis coordination on 22/7 I employ what I call a prospective research strategy where the aim of the analysis is to try, to the extent possible, to examine the actions taken and the coordination processes in real time. And, more broadly, to situate police crisis coordination on 22/7 in its broader historical and institutional setting (Vaughan, 1998).

The most reliable diagnostic evidence that can be obtained is from data sources that document the sequence of events in real time such as recordings of the communication and video recordings. There exist some studies on crisis management during real incidents (i.e. not exercises) that have had access to "real-time" data sources (e.g. Cornelissen et al., 2014; Dearstyne, 2007; Groenendaal & Helsloot, 2016). However, such studies are rather the exception than the rule. By contrast, crisis management research is often consigned to post-crisis accounts of what happened, for example via interviews, questionnaires and media articles. To be sure, post-crisis accounts can provide important insights into what happened, but must at the same time be treated with caution because human memories do not exist in a vacuum, but can be disrupted by things we experienced earlier (Loftus & Hoffman, 1989; Loftus & Pickrell, 1995).

This study has had access to real-time data sources (described below), which give a unique opportunity to examine how crisis coordination actually happened in a detailed and reliable way. The process tracing procedure applied in this study followed a three-step procedure. First, I browsed all evaluations of 22/7 and made a general timeline of the events and made notes on specific sequences that I deemed as potentially interesting for closer examination. Second, I have selected delineated sequences of events, examined them in more detail, and made preliminary narratives of these sequences. Third, I have conducted preliminary analysis of these narratives using different theoretical perspectives derived from the existing literature. Steps two and three have been reiterated numerous times, and during this process I have gradually developed a clearer, more delineated and concrete idea of what my object of study is (cf. Thomas, 2011). I started out broadly focusing on the crisis response by the police and turned to the more delineated study of crisis coordination, and from (trying to) explaining individual actions, to rather focus on human interactions, within and across organizations.

As the object of study crystallised, it also became more evident which sequences of events were most relevant given what my object of study was. The final selection was based on a trade-off between two partly conflicting aims: i) providing a chronologically and logically structured account of the police response, ii) providing as rich and detailed as possible description of the sequence of events. In the end, I analyzed four sequences of events of in-crisis coordination, cf. chapter 6 to 9, and one sequence of events of pre-crisis coordination, cf. chapter 5.

The sequences of events were analyzed by striving to answer three sets of inter-related questions. First, who was coupled to what information (information-coupling), and who was coupled to the respective terrorist attacks (problem-coupling), when and how? Second, who took directive actions to bring about coordination when and how? Third, related to those who were coupled to the respective problems, what was their level of shared situational awareness, their problem-fit and to what extent did they have a clear division of work, at different points during the sequence of events under scrutiny?

Counterfactual analysis

To back up the inferences from the within-case analysis I employ counterfactual reasoning. The basic structure of counterfactual reasoning relates to "temporally successive, suitably distinct events C and E that describe cases where, if C had not occurred, E would not have occurred" (Paul, 2009, pp. 159–160). Counterfactual cases are constructed by assuming everything is similar to the actual case except for the key independent variable. The crux for the researcher is to make credible arguments about what is likely would have happened in the counterfactual case. The arguments are made credible "(1) by invoking general principles, theories, laws, or regularities distinct from the hypothesis being tested; and (2) by drawing on knowledge of historical facts relevant to a counterfactual scenario" (Fearon, 1991, p. 176).

3.3.2 Data sources

The data collected and utilized in this thesis is derived from a broad selection of data sources, which can broadly be defined in four categories: data documenting the events of 22/7 in real time, documents, interviews and field observation. Some of the data sources are unique, because they have yet to be examined and analyzed by researchers. The table below provide an overview of what data sources are used in the respective empirical chapters.

Table 3.1: Overview of data sources used in the empirical chapters.

Data source	Chapter					
PRIMARY SOURCES:	4	5	6	7	8	9
PO-log			x	x	x	x
Transcript of radio communication			x	x		x
Transcript of phone communication			x	x		x
Police internal documents	x	x	x	x	x	x
Semi-structured interviews with personnel involved in 22/7 conducted by:						
- Evaluators in the police			x	x	x	x
- The 22 July Commission	x	x	x	x		x
- The author	x	x	x	x	x	x
Semi-structured interviews with experienced police leaders and operators conducted by the author	x	x				
Open interviews and informal talks with researchers and practitioners conducted by the author*						
Field observations			x	x	x	x
SECONDARY SOURCES						
Policy documents	x					
Evaluation reports of 22/7	x	x	x	x	x	x

* The data is not directly referred to in any chapter but has been important to enrich my understanding of the subject of study.

"Real time data" on 22/7

The unique access to real-time data sources enables me to give a detailed and at the same time highly reliable description of the sequence of events on 22/7. At the same time, it must be pinpointed that my real-time data sources are not exhaustive, notably numerous phone calls were made with cell phones. I have only had access to phone calls where the Operations Center in the Oslo or Nordre Buskerud police was the caller or receiver of the call. When there is uncertainty on what actually happened because the real-time data do not give a clear-cut

answer the uncertainty of the descriptions is made explicit in the empirical analysis.

Transcripts of phone and radio communication

I have had access to transcripts of phone and radio communication collected from the Oslo and Nordre Buskerud police, and from the 110-central that was involved in the operations at Utøya. As part of their internal evaluation, the Oslo police transcribed all phone conversations the Operations Center (OC) had in the time span from when the bomb exploded until 20:00. The evaluators also transcribed all radio communication the Oslo police had on their radio channels in the same time span.

In a similar vein, the internal evaluators in the Nordre Buskerud police transcribed extensive summaries of all phone and radio communication in the Nordre Buskerud police in the time span 17:20-20:00. The Nordre Buskerud police received first report about shooting at Utøya at 17:25. Although the transcripts from the Nordre Buskerud police are not verbatim they provide an extensive summary of the communication. Also, I have had access to the original audio recordings from the Nordre Buskerud police, which have enabled me to listen through the original dialogues. The added value of listening through the original files is twofold. Firstly, it allows me to listen through the full dialogues enabling me to see if the transcript summaries had left out details that were important for the purposes of my study. Secondly, it has given me first-hand experience with how difficult it is to interpret many of the dialogues on the police radio. Poor radio coverage in the area around the island Utøya was a severe problem that hampered the quality of the radio communication on 22/7.

In addition to the transcripts from the Oslo police and the Nordre Buskerud police, I have also examined the transcripts of the dialogues that involved the 110-central in police operation Utøya. 110-central refers to the Operations Center for the local Fire and Rescue Services.

PO-logs from 22/7

PO-log is an abbreviation for logs registered in the police operative system, an electronic system the Norwegian police use for their operative services and tasks. I draw upon copies of PO-logs from 22/7. A written request was distributed to all 27 police districts via email. After two reminders, I had received a positive response from 19 of the 27 police districts.

The PO-log is the most important tool for sharing written information during on-going police operations in the OCs in the police districts. The operators register and log their communication and the operations at the operative level. However, the PO-logs must be treated with caution, because they do not provide an exhaustive, nor necessarily an accurate, account of the events. This is because the registrations in the PO-log happen in real time. For instance, the operators register information from incoming calls concomitantly as they talk to the caller. Moreover, it is not possible to correct or adjust existing registrations made in the PO-log, the operators can only add new registrations. Finally, it varies between the police districts what types of decisions are registered in the PO-log. In other words, if the PO-log from 22/7 for one police district does not include any mention of the Commissioner having been alerted does not necessarily mean that the commissioner was not alerted.

Documents

Internal documents from the police

I draw upon a selection of internal documents collected from the police. Most prominent are the national crisis preparedness guidelines of 2007, which were revised in 2011 (Politidirektoratet, 2007, 2011b). The guidelines are intended to function as an encyclopedia, a handbook and a normative guide (Politidirektoratet, 2007, p. 5). I have also examined a number of other internal standard operating procedures and guidelines prescribing how the different roles in the hierarchical command are supposed to respond in operative police work. Moreover, I analyzed the evaluation reports of the annual crisis exercises by the Oslo police, which is one from many data sources relevant for chapter 4. In the analysis of the implementation of a new internal alarm system (chapter 5) I collected relevant circulars and internal email correspondence.

Policy documents

I have browsed all national policy documents in the field of societal safety and crisis preparedness from the twenty-first century and those focusing on the police. This includes white papers, legislation and documents from legislative processes, reports from *ad hoc* advisory commissions and government declarations. Those deemed as particularly relevant were subject to closer examination. Browsing the national policy documents was instructive to get some overview of the broader policy field and to make informed decisions on what policy documents to examine in more detail.

The annual performance contracts from the Ministry of Justice to POD were subject to a more extensive analysis, because they are important in steering relations between Norwegian ministries and agencies. I analyzed all performance contracts between 2001 and 2011 by counting the number of primary goals and the number of output- and activity indicators. I then examined each goal and indicator in more detail to assess whether they were related to crisis preparedness or not. To increase the reliability of the analysis I replicated the analysis a second time approximately six months after the first time. There were only minor differences between the two analyses, i.e. on a few indicators the number assessed as related to crisis preparedness was one more/less than in the first round of counting.

Evaluations and research on 22/7 and the police

I browsed all existing evaluations of 22/7, and relevant police research, primarily on the Norwegian police. The latter was done to form a research-based conception of what characterized the Norwegian police in the years prior to 22/7. The literature was selected by searching on relevant keywords such as “crisis preparedness”, “crisis management” and “organization”. There also exist two systematic literature reviews on Nordic police research that were instructive to get an overview of existing research (Høigård, 2005; T. D. Valland, 2011). I also contacted several police researchers for tips on literature and research of possible relevance.

As for the evaluations it should be added that the police evaluation was contested for being too uncritical in its assessments of own operations, and a reluctance to acknowledge that they could have responded differently with a better outcome (Christensen & Lægreid, 2014; Tunby Kristiansen, 2017). But the fact that the assessments in the police evaluation have been contested does not make their descriptive analysis invalid. Moreover, as I have had access to the same material as the police evaluators I have been able to cross check relevant sections in the police evaluation with the underlying data material to ensure its validity.

Interviews

The data material includes 84 semi-structured interviews of a total of 85 persons. I conducted 44 of the 84 interviews (between March 2015 and October 2017); five were telephone interviews, while the rest were conducted in person. The remaining interviews were conducted by evaluators in the police or the 22 July Commission (during fall 2011 and spring 2012). The interviewees include police personnel from the strategic, intermediate and operative levels in the police districts, leaders and police personnel from national police agencies and POD. Also, representatives from the Ministry of Justice, Police University College, Delta and the local Fire and Rescue service were interviewed (all interviewees are listed in the appendix). In the initial phase of the research process I had several informal conversations with persons with good knowledge of the police and/or 22/7. These informal conversations were instructive in gaining deeper knowledge of the case I was studying.

The topics covered in the semi-structured interviews were one, or several, of the following three topics: A) the organizing and practicing of crisis coordination in the police in the 2000s, which is the focus of chapter 4; B) the process of developing and subsequently implementing a new internal alarm system police 2003-10, which is the focus of chapter 5; C) the events of 22/7, which is the focus in chapters 6 to 9. The interviews are used as empirical evidence only after extensive triangulation with written sources and other interviews.

The interviews covering topic A) that were conducted by me were structured around a set of propositions on what characterized the organizing and practicing of the police in the field of crisis preparedness in the 2000s, for instance: “Crisis preparedness was not prioritized in the annual budgets. Not in the Ministry of Justice, POD nor in the police districts”. The propositions were derived from my preliminary readings of policy documents and secondary research. The aim of structuring the interviews around a set of propositions was twofold. First, to test the validity of the propositions. Second, to provoke the interviewees to take an active stand on specific questions. A potential risk with this approach is that the propositions may lead the attention of the interviewees to certain issues and at the same time neglect others. To mitigate the risk for such biases, I started the interviews with broadly formulated questions and ended by asking if there were issues the interviewee wanted to add.

The interviews covering topic B) were instructive to get a more comprehensive overview of the implementation process by gaining insights that could not be derived simply from document studies. The interviews covering topic C) were structured around questions focused on the events of 22/7, the types of questions differed depending on what role the interviewee had on 22/7.

All interviews I conducted were tape recorded, provided the interviewee(s) gave explicit consent, which most of them did. In any event, immediately after the interviews ended I wrote extensive summaries of them. How long the interviews lasted varied, but most interviews lasted between 45 and 90 minutes. When available and deemed necessary, I listened to the recording of the interview to ensure that my summaries gave a reliable reiteration of what had been said. Subsequently, the summaries were sent to the interviewees for their approval. In a similar vein, the minutes from the interviews conducted by the police and the 22 July Commission are not verbatim, but extensive summaries.

The interviews were coded and analyzed using the qualitative software program NVivo. The coding was used to ensure a systematic categorization and analysis of the interviews, and to reduce the risk of missing out relevant details. The coding process was primarily descriptive. Based on what the interview was

talking about I assigned it a code. If the interviewee was talking about what training and exercises they were given where she worked, I coded it "training and exercises". If the interviewee concomitantly talked about coordination challenges between the operative and intermediate level that emerged during exercises I would also code that excerpt of the interview "vertical coordination". Thus, the codes were not mutually exclusive.

One group of codes differed from the others as they related to what time period the interviewee was talking about rather than the substance. This "temporal" coding was employed on all interviews that included descriptions of sequences of events on 22/7. For instance, in the case of police operation Utøya delineated to the Nordre Buskerud police, I divided the police operation into five sequences[16] and coded the interviews with personnel in the Nordre Buskerud police accordingly. Applying a temporal coding allowed me to systematically analyze distinct sequences of the police operation, and synchronic comparison of where the different interviewees were, what they allegedly knew and assumed and so on.

Field observations

I conducted three types of field observations. Firstly, I have walked around on various locations that were central in the police operation Utøya to get a better understanding of the physical settings and environment. Of particular relevance was to get a better knowledge of the distance between the different locations, and to get a better feel of what was potentially observable from different vantage points.

The two other types of field observations were three days of observation at the Operation Center in the Oslo police and participating as observer on a full-scale exercise over two days. I spent three days of observation at the OC in the Oslo police, two evening shifts and one night shift. I shadowed the Operations Commander on the respective shifts from the standard brief at the start of the

[16] The five codes (referring to the five sequences) was: 'status before reports of shooting', 'from first report to deployment', 'from deployment to arrival Utøya mainland or boat', 'from arrival to arrest of perpetrator, 'upon arrest of perpetrator'.

shift and until the shift ended, except the night shift where I left halfway through the shift. The field observation at the OC gave me a better understanding of how the OC works in practice, in particular how they communicate internally and with operative units, how they use the different communication systems; it gave me a better understanding of the functionality of the different systems. I also had informal chats with the Operations Commanders and some of the operators about how they work and how the systems function. At one point, there were two parallel incidents that required immediate response from the OC, which gave me a glimpse of how little it takes before the capacity of the OC is put under pressure.

The full-scale exercise lasted for two days and all hierarchical levels from the ministry to the operative level in the police districts participated. A total of three police districts were involved, along with the Armed Forces. The exercise was a terrorist attack on day 1 and reports of possible terrorist attack on day 2. I observed the exercise from the main police station in the Oslo police, where I participated in all meetings in the Crisis Command Group (CCG), which has the central command at the intermediate level in crisis settings. Between the meetings, I spent most of my time at the OC and the most relevant CCG-functions, primarily the CCG Commander and the CCG 3 police operations. I also visited the strategic level with the commissioner and his group on a few occasions. I observed several of the same patterns during the exercise that I observed in my analysis of 22/7 such as information that gets "lost" or transformed (see chapter 7) and much information sharing via written notes.

In sum, the field observations enriched my understanding of how the OC operate and function, and how the OC and CCG operate and what challenges they confront in the initial phases of a predatory crisis. I took field notes during the field observations that I wrote out in more detail at the end of each day. It is important to note that the field observations were conducted five years after 22/7. Several changes have been made in the police in the aftermath of 22/7. The time lag reduces the validity of the field observations. Still, none of my inferences are based solely on the field observations, and more generally the field observations

served primarily as very instructive to get a better grasp of how the police operate in practice.

3.3.3 Research ethics

The two terrorist attacks that comprised 22/7 was the deadliest incident (caused by human intent) in Norway in the post-war era. It is difficult, and perhaps too early, to describe the magnitude of the attacks and how they affected Norway and its citizens. 22/7 is still a highly sensitive topic for many people, and raises understandably a lot of feelings and emotions, from sadness and despair to anger and frustration – over loved ones, over things that did not work on 22/7 and/or over things that have not been followed up in the aftermath of the crisis. 22/7 was also an extreme incident for many of the first responders who were involved. They were exposed to images and scenes they had never experienced before. Some of the interviewees also commented that the aftermath of 22/7 was stressful and cumbersome. The media pressure was high and some were subject to extensive criticism. In sum, these points call for a strong awareness of research ethics concerning research methods when examining the events of 22/7.

The data material I have been granted access to by the police include interviews that were given only a few months after the incident. Via contact persons in the respective police districts and agencies I have asked for explicit consent from all who were interviewed in the evaluations conducted by the police. All interviewees except two gave their consent that I could get access to their interviews. Moreover, all citations from interviews in this thesis have been cross-checked with the police for explicit consent.

As a final remark it can be noted that I had no direct involvement with 22/7, i.e. I was not present at any of the incident scenes or knew anyone who was killed or physically wounded by the attacks. Furthermore, I have no ties or relations to anyone working in the police. All parts of empirical analysis where I cite data material that thus far have not been published, i.e. transcripts from phone and radio communication and the PO-logs, have been sent to the respective owners of the data material to ensure that I do not reveal any information that is to be kept from the public due to privacy concerns of a third party or due to secrecy regulations.

EMPIRICAL ANALYSIS, part I: Pre-Crisis Coordination

The empirical analysis is divided into two main parts. The first part is focused on pre-crisis coordination, i.e. the efforts to build crisis coordination capacities in the police in the years prior to 22/7, while the second part is focused on the in-crisis coordination on 22/7.

This first part comprises two chapters: chapters 4 and 5. Chapter 4 examine how crisis coordination capacities were organized and practiced in the 2000s, while chapter 5 zooms in on one particular process: the process of selecting and subsequently implementing a new internal alarm system in the police, from its start in 2004 and until 2011. The analysis in chapter 5 elucidates the descriptive analysis in chapter 4 by demonstrating how characteristics of the pre-crisis coordination can significantly impact the in-crisis coordination in response to one particular event. More specifically, the internal alarm system failed on 22/7. I argue that the system did not fail because of operative error, but because of factors that can be linked to characteristics of the pre-crisis coordination outlined in chapter 4.

4 Police Crisis Preparedness and Coordination in the 2000s.

4.1 Introduction

In this chapter I examine *How were the police's crisis preparedness and coordination capacities designed and practiced prior to 22/7?* The purpose of the chapter is to offer valid descriptions of the pre-existing crisis coordination structures and practices in the police. I focus primarily on the meso-level, i.e. the design and practices within the police, but I also pinpoint characteristics of the institutional and technical environment the police operated in because the structural characteristics of the police can be linked to broader historical, political and institutional factors at the macro-level (Allison, 1969; Sagan, 1994; Snook, 2002; Vaughan, 1996, 1998).

I take the beginning of the 2000s as a point of departure. This is done for both substantial and practical reasons. The implementation of *Police Reform 2000* in 2001-02 marked a substantial change in what had been decades of structural stability in the design of the Norwegian police. A new national police directorate, *Politidirektoratet* (POD) was created in 2001, and 54 police districts were reduced to 27 in 2002. Furthermore, the 9/11 in 2001, and subsequent terrorist attacks in Madrid in 2004 and London in 2005 put international terrorism on the agenda in the Western world.

The overall argument in this chapter is that the crisis preparedness and coordination in the Norwegian police in the 2000s was characterized by a decentralized silo structure, both in its design and how it was exerted in practice. The police were characterized by many silos (police districts) with few horizontal structures and de facto no equivalent to the local Operation Centers at the national level. The crises that occurred rarely put the capacity of the local police districts to the test. Practicing inter-organizational crisis coordination was limited. Moreover, the majority of crisis preparedness capacities in the police were at the local level. There was no significant crisis coordination capacity at the national level, and the development of crisis preparedness and coordination capacities was largely left to the discretion of the local commissioners.

In the next sub-chapter, I give a brief introductory overview of the Norwegian police (4.2). Then I examine central characteristics of the technical and institutional environment the police operate in (4.3). The remainder of the

chapter focuses on the police organization: first, its division of work (4.4) and the design of the police crisis preparedness (4.5). I then examine crisis preparedness and coordination capacities at the national (4.6) and local level (4.7) followed by an own sub-chapter on the information processing capacity in the police districts (4.8). I end by examining how crisis preparedness and coordination was exerted and exercised in practice (4.9), followed by a summarizing discussion (4.10) before I conclude (4.11).

4.2 The Norwegian police: organizational levels and primary actors

In 2011, the Norwegian police comprised the national police directorate, *Politidirektoratet* (hereafter called POD) and five police agencies at the national level. POD had the overall responsibility for the strategic management, governing of the police, including the national police agencies and the local police districts. POD was at the same time bound to govern in accordance with the guidelines and instructions given by its superior governmental body, the Ministry of Justice (MoJ).

In addition to police powers, the Norwegian police were, and still are, responsible for border control, certain civil duties, coordinating search and rescue operations, counter-terrorism, highway patrolling, writ of execution, criminal investigation and prosecution. At the local level, the police comprised 27 police districts, which differed significantly in geographical size, cf. figure 4.1.

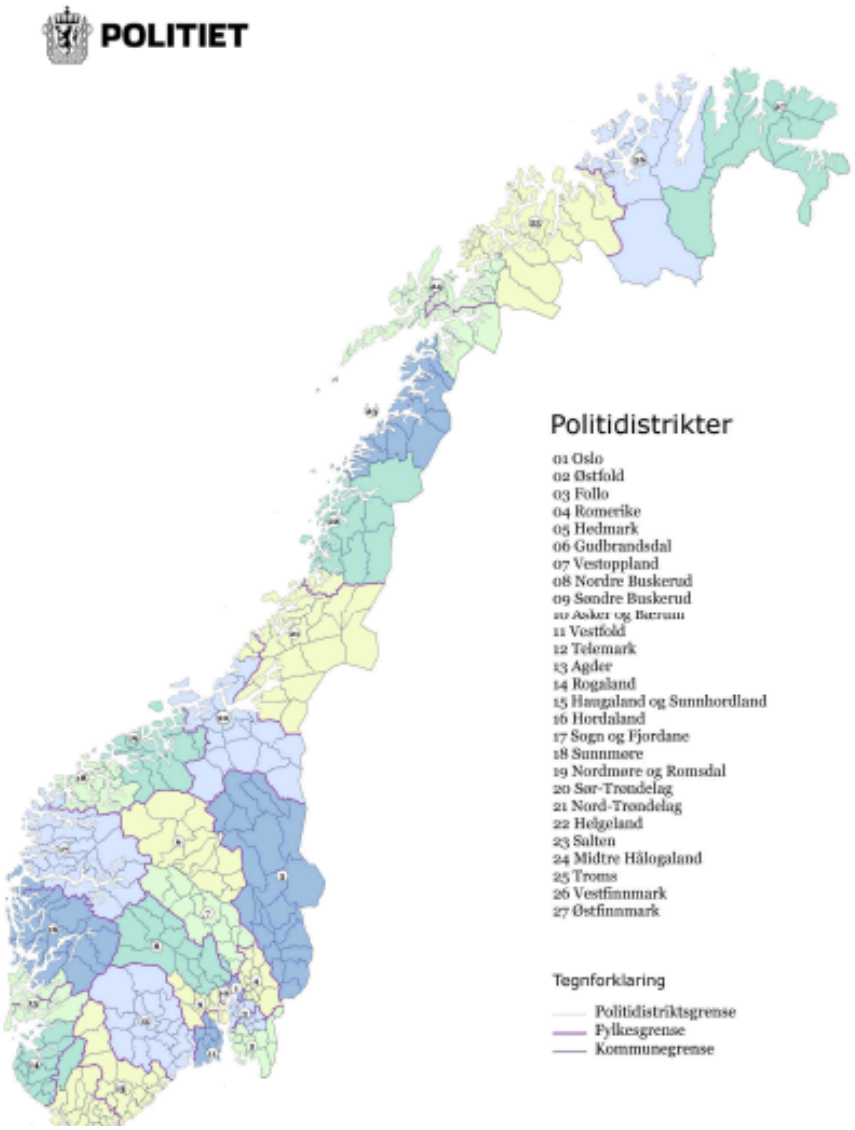

Figure 4.1: Overview of the 27 police districts in Norway.

The police districts were governed by local commissioners, which were appointed as senior officials (*embetsmenn*), by the government. *Embetsmenn* can normally not be suspended without legal verdict and can also not be transferred to another position against their own will.[17] Moreover, the police districts were,

[17] See *Embetsmann*, URL: https://snl.no/embetsmann, visited 20.09.18.

and still are, expected to handle all incidents within own jurisdiction (Politidirektoratet, 2011b).

A distinctive feature of the Norwegian police is that the Norwegian Prosecuting Authority is an integral part of the police service at the local level, while separated at the national level. The higher authority of the Norwegian Prosecuting Authority is organized in a separate government agency led by the Director General of Public Prosecutions. The lower authority consists of police prosecutors, which are employed in the local police districts and led by the local commissioners. In other words, the local commissioners have both police and prosecutor authority within own jurisdiction. The appropriate balance between police powers and criminal investigation and prosecution has been a contested issue for years, for instance on questions related to promotion and the division of capacities (Johannessen, 2011). For a long time, it was a formal criterion that one had to have a law degree to be considered an eligible candidate for a position as commissioner in a police district. And, by 2006, it had only happened on two occasions that a person without a law degree was appointed as local commissioner (Aasdalen, 2006).

Another distinctive feature of the Norwegian police is its generalist orientation in terms of functional specialization (Birkeland, 2007; Myhrer, 2007). There are two patterns that crystallize when browsing the history of the Norwegian police in terms of functional specialization. First, functional specialization has been limited. Today there are five national police agencies, with forensic, white-collar crime, immigration, traffic surveillance and police education respectively as their primary task. The police agency with responsibility for forensic crime, Kripos, also had the responsibility of operating the national internal alarm system that was implemented in the 2000s, which is the focus in the next chapter. Second, when there has been functional specialization it has often originated from a specialized department within the Oslo police district.

The Norwegian police is unarmed. That being said the Norwegian police practice what is called “mobile storage” (*fremskutt lagring*) of their weapons, i.e. police officers store their firearms in locked boxes in patrol vehicles. If the police

officers assess armament as necessary for an operation they request permission from the commissioner via the Operations Commander to arm themselves.

Traditionally, the Norwegian police has consisted of MoJ and POD (from 2001) at the national level and the police districts at the local level. In recent years, however, a few new police agencies with a national responsibility based on functional specialization have been established. Three of the five national police agencies started as specialized units in the Oslo police district, including the agency responsible for police education. This illustrates the special role the Oslo police district has had within the Norwegian police organization. Much of the developments on specialized fields have directly or indirectly grown out of the Oslo police district (NOU, 2017, p. 31). This is very much the case for the national capacities within crisis preparedness, which are under the command of the Oslo police district, rather than one of the organizations at the national level.

4.3 The police and its technical and institutional environment

Before zooming in on the meso-micro relations inside the police, I outline important features of the macro-meso relation between the police organization and its technical and institutional environment. Technical environment simply refers to the tasks and contingencies in the environment the police operate in which are relevant or potentially relevant to the goal setting and goal attainment of the police (cf. Dill (1958), cited in Thompson, 1967, p. 27).

The Norwegian police are a public organization subject to political steering. The "public" and the "political" component condition and influence core characteristics of the police organization: its goals and values, how it is organized and how it operates. Thus, to fully grasp the pre-existing structures and practices that conditioned the police's crisis coordination on 22/7 it is essential to examine the broader institutional environment, in which the police operated in the years prior to the 2000s.

This general argument is grounded in the so-called "Bergen approach"[18] (Olsen 2018), with its emphasis on living, rather than formal-legal, institutions, and how public organizations develop in the interface between politics and public administration, in an ambiguous environment and shifting preferences among those in power as well as the electorate (Danielsen & Renå, 2018). By institutional environment I mean the norms, standards and expectations held by important stakeholders. For the scope of this thesis I focus on the political stakeholders, and in particular the political steering of the police. This is included because the decisions and priorities made by POD and the commissioners in the police districts are not made in a vacuum, but are influenced and conditioned by any signals and priorities that are given by its political superiors. The political context within which the police operate, and the role of the MoJ more specifically, are of importance because their political and budgetary decisions influence what priorities POD and the commissioners can make (cf. Vaughan, 2005, pp. 65–66).

In the next four sections I describe: the longstanding bipartisan consensus on what role the police should have in the society and its basic organizing principles (4.3.1); the technical environment the police operate in delineated to the extent of predatory crises and related events (4.3.2); how "societal safety" came high on the political agenda in the 2000s (4.3.3); and, based on analysis of the annual performance contracts from MoJ corroborated by secondary sources and own interviews, I argue that the political steering of the police in the 2000s was detailed and biased towards crime prevention (4.3.4).

4.3.1 Bipartisan consensus on the role of the police

In 1976, the government appointed an independent committee, the so-called "Police Role Committee", to conduct a thorough assessment of the role of the police in the society, and what tasks it should have (NOU, 1981, pp. 32–33). They worked over a period of ten years, and their work had a major impact on the future trajectory of the police (St. meld. nr. 42 (2004-2005), 2005, p. 10).

[18] The founding father of this approach was Knut Dahl Jacobsen (e.g. Jacobsen, 1960, 1963, 1964). See Olsen (2018) for a brief review and references.

The ten basic principles they outlined in order to answer the question – what type of police do we want – have been particularly influential, often referred to as "the Ten Commandments". Among the ten principles the committee suggested were: "the police should have a civilian approach" (civilian is here meant as opposed to martial), "we should have one, uniform police" (i.e. not split up in many separate specialized organizations), "the police should be decentralized", "the police officer should be a generalist", "the police should be integrated in the local communities", "the police should prioritize among its tasks, and put main emphasis on prevention" (NOU, 1981, pp. 73–86).19

In the succeeding years the parliament has explicitly and unanimously, on several occasions (e.g. Innst. S. nr. 192(1991-1992); Innst. S. nr. 145 (2005-2006), 2006, p. 8), and as late as in 2015 (Innst. S. nr. 306 (2015-2016)), stated that these principles still count as basic principles for the police. Thus, in general, there has been bipartisan consensus across the traditional economic right-left cleavages on what type of police they want: a decentralized police that aims for union and uniformity, i.e. not split up into many specialized organizations; has a civilian approach, i.e. in contrast to more military-oriented; focuses on prevention and is anchored in the local communities.[20]

4.3.2 A peaceful technical environment

More generally, the Norwegian police have had few opportunities to gain crisis management experience from real life situations because it operates in a, comparatively speaking, peaceful environment.

In the 1980s and 1990s there was a number of terrorist attacks conducted by right-wing extremists targeted at immigrants, asylum seekers' housing and left-wing extremists and radicals. None of these were deadly however. Still,

[19] The other four principles were: "the police should reflect the ideals of the society", "the police should operate through interaction with the civilians", "the police should have a broad recruitment base [socially, gender-wise and geographically]", "the police should be subject to effective control by the society".

[20] The emphasis of local orientation has many of the trademarks of what is known as community policing or community-oriented policing. Community policing is a strategy of policing that focuses on building ties and working closely with residents and local organizations in the communities.

several of the attacks included explosives, and could have easily have turned deadly. For instance, on the night of 1 May in 1979 when a bomb wounded two police officers and a civilian, and later the same day, when a neo-Nazi threw a small bomb in the 1 May parade in Oslo. Or in 1994 and 1995, when a meeting place for left wing radicals was subject to two bomb attacks (Dagbladet, 2004). In 2001, a Norwegian-Ghanaian teenager was stabbed to death by two right-wing extremists at Holmlia, Oslo. By then the groups of violent right-wing extremists and their activity had been significantly reduced. Throughout the 2000s there were a couple of minor terrorist attacks like the incident in 2006 when shots were fired at the synagogue in Oslo.

By international standards, Norway has historically been subject to few terrorist attacks, and few have been deadly (Engene, 2007; Ravndal, 2017). In the *TWEED* database, covering cases of intrastate terrorism in 18 Western European countries 1950–2004, Norway is registered with two incidents in this time span and one killed (Engene, 2007). In the *Global Terrorism Database* Norway is registered with 14 incidents and one killing in the time span from 1970 up until 22/7. Terrorism is a contested and ambiguous concept and databases like TWEED and GTD should thus be treated with caution (Ravndal, 2016). What is beyond doubt however is that Norway, prior to 22/7, never experienced any major terrorist attacks that put the crisis coordination capacities of the police to the test.

More generally, the Norwegian police rarely deal with crimes in which firearms are involved. To illustrate, from 2002 to 2013 there were 31 incidents in which the Norwegian police used firearms (Politidirektoratet, 2014). This yields an annual average of 2,6 incidents in total where the police had to use firearms. That is, not 2,6 incidents per police officer or police district, but 2,6 incidents for the entire police organization *as a whole*.

4.3.3 "Societal safety" on the political agenda

A series of domestic hurricanes, floods and transport accidents in the late 1990s and early 2000s, combined with international shocks like 9/11, put crisis preparedness higher on the political agenda in Norway (Fimreite, Lango, Lægreid, & Rykkja, 2014; O. E. Olsen, Kruke, & Hovden, 2007). In the period

2000–10, six ad hoc government-appointed advisory committees on issues related to societal safety and crisis preparedness were set up, and five parliamentary white papers were produced. As part of this process, the concept "societal safety" emerged (O. E. Olsen et al., 2007), and was first defined in a parliamentary white paper in 2001: "The society's ability to maintain critical social functions, to protect the life and health of the citizens and to meet the citizens' basic requirements in a variety of stress situations" (Norwegian Parliamentary White Paper No. 17, 2001–2002).

The most salient ad hoc advisory committee was the so-called Vulnerability Committee (*Sårbarhetsutvalget*) in 2000 that concluded that the organizing of societal safety in Norway was fragmented and had severe limitations (NOU, 2000). The Vulnerability Committee suggested substantial structural changes in the governmental structure including the establishment of an own societal safety ministry, but the subsequent political process resulted in only minor structural changes (Lægreid & Serigstad, 2006, cf. Serigstad 2003). A highly critical report by the General Auditor in early 2008 reinforced the call for policy changes in the field of societal safety (Riksrevisjonen, 2008).

In the government declarations of 2005 and 2009, the so-called *Soria Moria I and II Declarations*, societal safety was highlighted as a distinct policy issue within the broader policy field of criminal justice. In the *Soria Moria I Declaration,* "Societal safety" and "The police" were two out of seven[21] headings in the chapter titled Criminal Justice. Under the heading "Societal safety", it was stated that: i) the civil-military collaboration and the anti-terror preparedness would be reinforced; ii) there would be an increased use of exercises at all levels in the public sector; and, iii) the process of establishing a new digital radio communication system for the emergency agencies would be intensified (Stoltenberg I, 2005, pp. 69–70). In contrast, the section on the police has few mentions that can be said to be related to crisis preparedness. There are however mentions of increasing the size of the police force and "ensur[ing] investments to gear and vehicles". The importance of a decentralized police is

[21] The other headings were Prevention, Courts, Correctional Services, Violence and Assaults, the Leasehold Act.

emphasized, giving efficient services to the public, and that the police should still be unarmed with efficient storage of weapons in the vehicles with easy access. Of specific policy issues, the fight against white-collar crime is emphasized and that the services of the police and the correctional services should not be privatized (Stoltenberg I, 2005, p. 67)

The Soria Moria II Declaration had less concrete goals, and is organized differently. Issues related to the police and societal safety are covered in the chapter *More Safety – Less Crime* (Stoltenberg II, 2009, pp. 66–69). The chapter consist of 824 words over four pages, 130 of these (16 %) concern societal safety. The remainder of the text is focused on the police, crime prevention, prosecution and criminal investigation, the courts and the correctional services. Akin to the *Soria Moria I Declaration*, this declaration also emphasized the importance of maintaining a decentralized police service and that the reinforcements of the police budgets and staffing would continue. Of specific policy issues, the fight against domestic violence was targeted as a prioritized issue. Regarding societal safety, it is stated that the government will continue "clarifying the responsibilities, gray-zones and continue to focus on exercises in all levels of the public administration and continue to reinforce the volunteers in the rescue services" and continue the on-going work on establishing a new digital radio communication system for the emergency agencies (Stoltenberg II, 2009, p. 68).

To summarize, crisis preparedness came higher on the national political agenda during the 2000s in terms of numerous policy documents being produced. This increased attention at the national level did however, as I will argue below, not significantly affect the Ministry of Justice's political steering of the police.

4.3.4 Ministerial steering: Detailed and biased

Performance management instruments in general and annual performance contracts (*Tildelingsbrev*) in particular gained prominence in the Norwegian public sector during the 1990s, and in 1997 they were explicitly established as the guiding principle in the state financial regulations (Christensen et al. 2004, 99). With their annual performance contracts, the ministries signal what tasks and activities subordinate agencies are expected to prioritize and how the delegated finances are expected to be spent. Askim, Bjurstrøm, and Kjærvik

(2017, p. 9) describe this system as characterized by quasi-contracting operated on a vertical approach, based on a foundation of authority. Several case studies have demonstrated the importance of annual performance contracts in steering relations between Norwegian ministries and agencies (Eltun, 2013; Fremstad, 2013; Helle, 2016; Kaasin, 2016).

The annual performance contracts from the MoJ to the POD have been among the most detailed, in terms of number of performance goals, compared to other ministries (Askim, Bjurstrøm, & Kjærvik, 2017). Issues that are not among the list of objectives are less likely to be prioritized (Wathne, 2015).

The performance contracts consist of primary goals, sub-goals, and output and activity indicators. In 2004–11, the number of primary goals set by the MoJ varied between four and six, cf. table 4.1. From 2006 onwards, societal safety was included as one of six primary goals, and formulated as "Increased societal safety". The other goals were: "Safety and reduced crime"; "Good and efficient conflict resolution and prevention"; "Maintain the rule of law for individuals and groups"; "A transparent, efficient and quality focused judicial administration"; and, "Protect the interests of Norway internationally within the jurisdiction of MoJ".[22]

[22] The formulation of these six goals was not subject to substantial changes in the time period I have examined.

Table 4.1: The share of primary goals focused on societal safety in annual performance contracts, 2004–11.[23]

Year	Total of primary goals	…of which on societal safety	in percentage
2004	4	0	0
2005	4	0	0
2006	6	1	17
2007	6	1	17
2008	6	1	17
2009	6	1	17
2010	6	1	17
2011	5	1	20

If the number of output- and activity indicators were equally distributed between the six primary goals, each primary goal would have 17 percent of the total number of output- and activity indicators. However, on average for the time span 2006–2011, the output- and activity indicators on societal safety comprised only 6 percent of the total, cf. table 4.2.

Table 4.2: The share of output and activity indicators focused on societal safety in annual performance contracts, 2004–11.

Year	Total of output-/ activity indicators	…of which on societal safety	in percentage
2004	86	0	0
2005	63	0	0
2006	71	6	8
2007	76	3	4
2008	82	3	4
2009	84	4	5
2010	77	0	0
2011	61	8	13

[23] The performance contracts from 2001–03 are excluded because their format is less elaborate. The operationalization draws on Askim and colleagues' large-N studies of annual performance contracts (Askim, 2015; Askim et al., 2017). The numbers have also been validated by cross-checking with an existing study on political control and steering in police (Fremstad, 2013). I am grateful to Askim, Bjurstrøm, and Fremstad for giving me access to their data.

The output- and activity-indicators on societal safety are relatively vague. Recurring themes are updating and revising existing plans and guidelines and ensuring good local crisis preparedness and its coordination capacity through exercises. For example, in the performance contract of 2009 (p. 12), it is stated that "Through exercises the police shall develop and maintain its ability to coordinate the crisis management by themselves and its collaborating partners". Output- and activity indicators related to other primary goals are much more specific. For instance, "Establish a group in Kripos [police agency] consisting of four criminal investigators with sexualized violence as its responsibility" (p. 9) and that asylum seekers are to be registered "within 24 hours" (p. 15).

A closer examination of the distribution of the output- and activity-indicators demonstrate that there is a strong bias in the distribution towards the primary goals "Safety and reduced crime" and "A transparent, efficient and quality focused judicial administration". On average, the output- and activity-indicators related to the two aforementioned primary goals comprise 39 and 40 percent of the total number of activity- and performance-based indicators in the time span 2006–11. Put differently, there was a strong bias in the detailed annual performance contracts towards crime prevention and maintaining transparent and efficient prosecution processes. Based on these numbers it seems reasonable to conclude that societal safety was not a primary focus in the steering of the police by the Ministry of Justice (MoJ). The political steering of the police was detailed and biased towards other issues than crisis preparedness.

A related and important point is that much of the annual budgets allotted from the MoJ to the POD and the police districts are pre-fixed. Based on an economic analysis of the annual allotments of finances from the MoJ via POD to the police districts, the magazine affiliated to the biggest union in the police documented in a series of articles that the majority of financial resources in the police organization are, in practice, not disposable by the POD or the commissioners in the police districts. The reason, it was argued, was that much of the finances are pre-fixed on permanent expenses such as salaries, and on

specific issues the government wants to prioritize (Inderhaug & Mortvedt, 2016; Inderhaug & Trædal, 2016; Trædal & Inderhaug, 2016).

What were the implications of this detailed and biased steering by the MoJ? According to one of the top leaders in the POD, it was challenging for the POD to reduce the number of performance goals in its steering because it could backfire on them if it became known in the parliament that some of the political goals had not been followed up (POD 2). In 2014, three years after 22/7, an audit of the MoJ criticized the structure of the annual performance contract and articulated fears that a possible effect was that work related to crisis preparedness would be given low priority (Helsetilsynet, 2014).

The detailed steering by the MoJ subsequently affected the POD's steering of the police districts. Several studies indicate that the commissioners' prioritizing within their own police districts is heavily influenced by what they are measured on (Fremstad, 2013; B. Valland, 2012; Wathne, 2015). This is in line with the intention of performance-based steering, where the superior body steers the subordinate primarily on performance measures. The measures can be input- and/or output- and outcome oriented (Askim, Bjurstrøm, & Kjærvik, forthcoming; Bevan & Hood, 2006; Johnsen, 2007; Pollitt, 2018; Van Dooren, Bouckaert, & Halligan, 2010).

A potential unintended consequence of performance-based steering is goal displacement, i.e. fiscal resources are allotted based on the performance goals per se instead of an analysis of what issues are most salient. The internal evaluation of 22/7 by the police concluded that the documentation they had examined "indicated" that there had been goal displacement (Sønderland, 2012, p. 24). Their conclusion is corroborated by interviews I have had with police leaders with extensive experience from various levels in the police districts. These interviewees said that an important reason why crisis preparedness, training and exercises were not prioritized is that the police districts were not measured on it (O 2 and 3; POD 4; NB 4). As one interviewee put it, "Issues without performance goals became partly uninteresting for us in the leader group (…) Our budgets were, and are, fully governed by these performance goals (…) Training (…) was not a focus for us in the leadership because we were not

measured on it" (NB 4). These statements are further corroborated in sub-chapter 4.7, where I demonstrate that crisis preparedness training and exercises at the intermediate level in the police districts, and inter-organizational crisis coordination, was limited. I would argue that one of the reasons for this is the detailed and biased political steering by the MoJ.

I now shift the analytical focus from macro-meso relations to meso-micro relations within the police. In the next sub-chapter, I outline how the work in the police was organized (4.4), before I turn to the design of police crisis preparedness more specifically (4.5). Then, I outline the characteristics of the crisis preparedness and coordination capacities at the national (4.6) and local (4.7) level, followed by an analysis of the information processing capacity at the local level (4.8). Then I describe how crisis preparedness and coordination was exerted and exercised in practice (4.9), before I summarize (4.10) and conclude (4.11).

4.4 The division of work in the police

In chapter two I discussed the tension between specialization, particularly geographical and functional specialization, and coordination. In 4.2 I argued that the extent of functional specialization in terms of how the Norwegian police divide their work has been limited (cf. 4.2). I now outline the vertical specialization of the police, which was characterized by structural stability until 2001 when an additional hierarchical level was introduced with the establishment of the POD (4.4.1). Then I turn to the local level, where geographical specialization has been the dominant organizing principle, which has reinforced the decentralized silo structure (4.4.2).

4.4.1 Vertical specialization: From structural stability to a new hierarchical level

The vertical specialization of the Norwegian police was characterized by continuity and stability until 2001. Since 1936 and throughout the twentieth century, the Ministry of Justice (MoJ) has governed at the national level, and the local level was organized into 54 police districts until 2002. *Police Reform 2000*,

implemented in 2002, marked the first major change in the vertical specialization of the police. A new national police agency, the national police directorate (*Politidirektoratet, POD*) was established. In addition, the 54 police districts were reduced to 27 (Inns. S. nr. 241 (2000-2001), 2001).

The overarching aim of creating a new national police agency was to strengthen the central governing capacity of the police. The white paper outlining the goals of the new POD summarized its primary tasks in 14 points. Recurring themes were strategic steering, governing, and coordination. One of the 14 points pertained to crisis management-related tasks: "POD shall further develop the police operative crisis management apparatus at the central level" (Ministry of Justice, 1999, p. 83–84). Thus, the POD was expected to take a lead role at the central level in developing the operative crisis management apparatus further, but this was only one of many tasks where the POD was expected to take a leading role.

The establishment of the POD in 2001 did not result in substantial changes in the command structure of crisis responses. Within POD, the responsibility for crisis preparedness was organized at the lowest level in the organizational hierarchy. The Crisis Management Unit (*Politiberedskap*) was one of five administrative units subordinated within the Department of Police Operations (*Avdeling for politifag*), which was one of five departments subordinated under the national police commissioner (Statskonsult, 2004, p. 11). Moreover, according to the leader of the Crisis Management Unit at the time, there was a discrepancy between the staffing (two to three employees, of a total of 150 POD employees) and the task portfolio that grew over the years (POD 5). If we take the internal organization of work as an indication of what is prioritized and not, the internal organizing of the POD strongly indicate that crisis preparedness was not highly prioritized by the leadership in POD.

Large responsibilities, little leeway

Fulfilling its intended strategic and coordinating role was no easy task for the POD as it was situated between an active ministry and local police districts governed by commissioners used to having high autonomy. There are several reasons why the POD has struggled to find its role. First, although the idea of

establishing a national police directorate was not new, it had historically been met with scepticism by the parliament. Among the reasons was a fear that the establishment of a central police agency would reduce the possibilities for political control. However, when the question of establishing a new national police directorate came to a vote in the parliament in 2000 a clear majority voted for its establishment (Christensen, Egeberg, Larsen, Lægreid, & Roness, 2007, pp. 216–219).

Second, as I argued in 4.3.4, the POD was subject to detailed steering by MoJ. According to the former national police commissioner (2001–11), the POD was given great professional leeway by the MoJ when it was established in 2001, but that this changed from 2003 onwards. The actual delegation diminished due to active political steering and control "from the side" (Njåstad, 2017), reducing the discretion and independence of the police director. This curtailed discretion included prioritizing between different measures and disposal of their budgetary resources (Killengren, 2012, p. 12). An evaluation of the POD in 2004 concluded that the MoJ should strive "to give the POD more leeway and better coordinate its own requests to the POD", and to exert a "less detailed steering of the police organization within the police professional area" (Statskonsult, 2004, p. 7). A new evaluation of the POD in 2013 echoed the conclusions of the 2004 evaluation by concluding that the POD still struggled to find its role in the hierarchy, that it had few steering instruments, and that it was reluctant to use the ones it had (Difi, 2013).

Third, most of the 150 employees who were recruited to the POD when it was established came from the Police Department in MoJ (M 1; POD 2). There is reason to believe they reproduced the norms and codes of conduct they enacted at MoJ. As one experienced leader from one police district described it, "For a period there were two organizations [MoJ and POD] that wanted to do the same task" (SB 6). Another critical point related to recruitment, relevant for this thesis, is the lack of operative experience in the POD. From when the POD was established and until 2011, about one third of the staff in POD had a law degree, which in this context can be described as a primarily theoretical subject. In

contrast, one fifth of the staff had police education, which has operative police work as one of its main subjects.[24]

4.4.2 Horizontal specialization: Geography as organizing principle

The horizontal specialization in the police has historically been based on a geographic principle (cf. Gulick, 1937), i.e. a unitary police organization, organized in many local police districts, each capable of handling all police matters within their own police district. The emphasis on a decentralized police has institutionalized the Norwegian police as characterized by highly autonomous police districts where the commissioner has the final say in most police matters. All interviewees, I talked to regarding the autonomy of the commissioners in the local police districts, emphasized that the norm is that the commissioners govern "within own turf". In a survey distributed to all police leaders and employees in 2015, more than three quarters of those who responded agreed that the current police to some/large/very large extent could be described as decentralized and integrated in the local communities, and that the police officer is a generalist (Renå, 2016, pp. 17–18).

One strength with horizontal specialization based on geography, in countries with a heterogeneous topography like Norway, is that it enables the organization to adapt to local and regional differences. At the same time, there is the risk of too much local adaptation resulting in a fragmented police organization, which struggles to collaborate across police district borders. Local adaptation bias may also hinder the establishment of uniform codes of conduct and communication on relevant issues—for example, dissemination of salient information in a state of emergency, which I examine and discuss in more detail in the next chapter. These are "inherent weaknesses" of geographical specialization (Bach & Wegrich, 2019).

[24] The numbers are based on descriptive analysis conducted by the author, of data the author has requested and received from the POD.

4.5 The design of police crisis preparedness

In this sub-chapter I analyze the purposive formal structures (organizational design) of the police. I start by outlining the three principles that permeate the organizing of crisis preparedness and management in Norway (4.5.1). Then I turn to the command structure in the police and outline its hierarchical levels with a particular focus on the intermediate level in the police districts (4.5.2). I argue the police crisis preparedness guidelines were ambiguous regarding the role of the POD and the intermediate level in the event of a crisis. I end the sub-chapter with a look at the so-called "shooting in progress"-procedures for sharp operations that were introduced in 2008 (4.5.3).

4.5.1 National crisis preparedness and management: Three basic principles

The organizing of societal safety and crisis management in Norway was prior to 22/7 founded on three basic principles: liability, proximity and parity (St.meld. nr. 17, p. 4; cf. NOU, 2000, p. 24).[25]

The *liability* principle implies that every ministry and authority is responsible for crisis management within own sector. The emphasis on liability is closely related to the doctrine of ministerial responsibility, emphasizing strong sector ministries, which is a core principle in the organizing of the Norwegian government and bureaucracy (Andenæs & Fliflet, 2006; Christensen & Lægreid, 2002).

The principle of *proximity* emphasizes that a crisis should be managed at the lowest hierarchical level possible. For example, the municipality in which a crisis occurs is, in principle, responsible for organizing the response to the crisis. In a similar vein, the 27 local police districts are expected to handle all incidents that occurs within own jurisdiction, including crisis incidents (cf. Politidirektoratet, 2007, 2011b). Thus, geography becomes a central organizing

[25] In the aftermath of 22/7, the government introduced a fourth principle: the principle of cooperation. It emphasizes the necessity of collaboration between rescue teams and actors from different sectors, both public and private (St. meld 2011–2012). This principle has a long tradition as a core principle in the Norwegian rescue services (Auglend, Mæland, & Røsandhaug, 1998).

concept. This can be problematic if a crisis incident spans the boundaries of local municipalities and police districts (cf. Ansell et al., 2010). This was the case with the two terrorist attacks on 22/7. They happened in two different police districts.

The principle of *parity* underlines that the organizing of a crisis response should resemble the organizing in ordered settings as much as possible. Those assigned to handle problems of type *x* in a stable and ordered setting should also be the ones handling problems of type *x* in a crisis setting.

As pointed out by Fimreite et al. (2011), seen in combination the three principles exhibit inherent tensions. The principles of ministerial superiority and local self-government, paired with the principle of liability and the principle of proximity, constrain efforts to establish an integrated and coherent national organizing of societal safety and crisis preparedness and management. The principle of liability is still a strong principle in the Norwegian governmental apparatus and thus continues to create tensions between organizational units, sectors and administrative levels. The Ministry of Justice remains the central coordinating body of societal safety and crisis preparedness at the national level, but has been characterized as rather weak in terms of enabling inter-ministerial coordination, which exacerbates the challenge of building inter-ministerial and inter-organizational crisis preparedness capacity (Christensen et al., 2015; Fimreite, Lango, Lægreid, & Rykkja, 2011).

4.5.2 The command structure in the police: Three hierarchical levels

In the crisis management literature, it is common to make an analytical distinction between crisis management at the strategic and operational/operative level respectively (e.g. Boin, 't Hart, Stern, & Sundelius, 2005; 't Hart, Rosenthal, & Kouzmin, 1993). The strategic level typically refers to political and professional incumbents in formal leader roles at the top levels of government and organizations. The operative level typically refers to the managers and first responders operating at, or close to, the incident scene(s).

The design of the civil crisis preparedness system in Norway does not fit easily into such a dichotomy. For pedagogical reasons, I have decided to label the respective hierarchical levels in the system as political (exist only at the

national level), strategic, intermediate and operative at the national and local level respectively.[26] Figure 4.2 below lists the hierarchical levels in the Norwegian crisis preparedness system, focusing on the police.

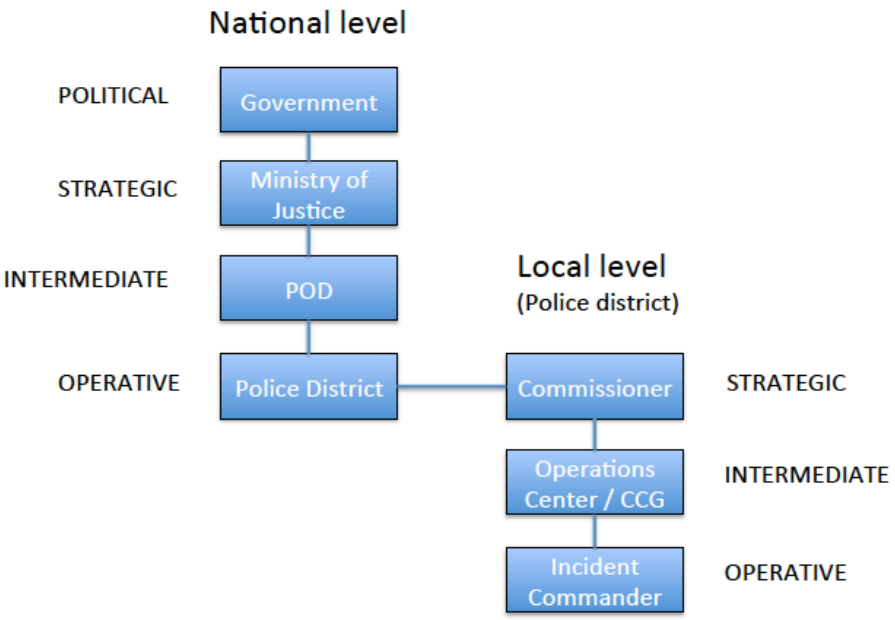

Figure 4.2: The structure of the Norwegian civil crisis preparedness system.

The highest level of crisis leadership at the national level is the political level, which is exerted by the government. Crisis leadership on the strategic level is exerted by the ministry that is most affected by the crisis incident, cf. the liability principle. In the case of predatory crises, the responsible ministry would typically be the Ministry of Justice. The intermediate level represents the third level in the hierarchy. In the event of predatory crises, this level would be led by the POD, while the fourth level – the operative level – would pertain to the local police district(s) affected by the crisis incident(s). The police crisis preparedness guidelines of 2011 state that, in the case of a crisis:

[26] In its original wording in Norwegian, what I call strategic, intermediate and operative are called *strategisk*, *operasjonelt* and *taktisk* respectively.

> *The POD can give operations orders to the [operative] level, advise the affected commissioners and chiefs of police agencies, and make sure that personnel and material capacities are deployable. The Directorate coordinates between affected commissioners and chiefs of special bodies, handles questions about policy and, when a need for such is identified, the POD assigns the coordination responsibility at the operative level to one designated commissioner. The POD collects and processes information from the [operative] level, coordinates with other actors at the [intermediate] level, and prepares status reports to the Ministry of Justice* (Politidirektoratet, 2011b, p. 32).

The guidelines state that POD *can* take a central coordinating role in the event of a predatory crisis, in particular when the crisis incident spans police district borders and exceeds the response capacity of the affected police district(s). Both of these characteristics were evident on 22/7, but POD struggled to find its role in the initial phase of 22/7 (see chapter 8). The fact that the guidelines have a "can"-formulation makes it unclear whether POD in fact is expected to do these tasks and whether it will do the tasks listed above in the event of a crisis. Here it can be added that the 2007-version of the guidelines was less ambiguous on POD's role, in the sense that it did not include a "can"-formulation. The 2007-version of the guidelines simply stated that, in the event of a crisis: "POD gives orders to (…)" (Politidirektoratet, 2007, p. 16).

In 2010, the POD implemented guidelines that prescribed expectations on how to practice and use the new system for internal alarm. The guidelines stated that national alarms were to be "effectuated by Kripos upon request by police district or police agency". Moreover, "the POD effectuates preparedness measures" (Politidirektoratet, 2010b, p. 3). However, the guidelines did not elaborate on what it meant by effectuating "crisis preparedness measures". In the revised crisis preparedness guidelines that came in 2011, "preparedness measures" (*beredskapstiltak*) are not mentioned one single time in relation to the police. In chapter 5, I argue it was unclear for POD and the other police

organizations what role POD was expected to have in the case of national alarms, and what "… effectuate preparedness measures" actually meant.

Turning to the local police districts, the command of the response is organized in three hierarchical levels. The commissioner is in command at the strategic level; the Operations Commander, and the Crisis Command Group (CCG) in extraordinary situations, at the intermediate level; and, the Incident Commander at the operative level. It should be underlined that the role of the Incident Commander in the Norwegian system is very different from its conceptual equivalent in the US-based Incident Command System (ICS), which upon 9/11 "became required of all federal crisis responders and all state and local responders receiving federal funding" (Moynihan, 2009, p. 897). While the Incident Commander is on top of the hierarchy in the US-based ICS (Bigley & Roberts, 2001, p. 1283), the Incident Commander in the Norwegian context refers to the one in command of the command post at the incident scene (Rimstad, Njå, Rake, & Braut, 2014, p. 3) and this person is always a police officer.[27]

As explained in chapter 1, the Operations Centers (OCs) play a prominent role as information nodes and mobilizers in the emergency response network, and as operations coordinators within own police district. According to the crisis preparedness guidelines in the police, the leadership at the intermediate and operative level in the 27 police districts must follow the same guidelines (Politidirektoratet, 2011b, pp. 32–34). Moreover those in command at the respective hierarchical levels during a crisis response are the same as those in command under normal operations (except CCG), which is in line with the principle of parity.

The CCG is mobilized and established in settings where the normal command structure is insufficient to handle the pending tasks. It is up to the Operations Commander to assess the need for mobilizing the CCG and effectuate mobilization upon approval from the commissioner. The aim of establishing CCG is "to get an efficient leadership and coordination of the capacities the

[27] The fire commander has the command at the Command Post until the police arrives (*Branvernloven,* § 12 b and c).

police district disposes" (Politidirektoratet, 2011b, p. 118). The CCG includes six functions:

- CCG 1 Personnel, responsible for personnel, finances and administration.
- CCG 2 Intelligence, responsible for the intelligence and coordinating the criminal investigations.
- CCG 3 Police operations, coordinates and controls the police operations, makes operative plans in close collaboration with CCG 2, the Operations Commander and the Incident Commander respectively.
- CCG 4 Logistics, coordinates the logistics including transport, medical support, radio systems and any other material capacities needed.
- CCG 5 Information, responsible for internal communication, external communication with media, and monitoring the media activities.
- CCG 6 Judiciary, assists the CCG with legal competence and advice in their planning.

Each function may be operated by one person or a group of people depending on the situation and is governed by a leader, called CCG 1, CCG 2 and so on. The overall command of the CCG is executed by the CCG Commander. The tasks of the CCG will in principle be the same regardless of what type of incident it is – assist the commissioner in his/her management of the crisis response through implementing measures and following them up – but the size and composition of the CCG may vary depending on the incident (Politidirektoratet, 2011b, pp. 122–128).

When the CCG is mobilized and established there is a shift in the command structure from "(…) ordinary line of command to CCG-command" (Politidirektoratet, 2011b, p. 118), which conflicts with the principle of parity. The crisis preparedness guidelines underline the importance of making the shift known for everyone involved, because the shift from normal operations to extraordinary operations will often be "gradual" (ibid). At the same time, the guidelines state that "The role of the Operations Center should, to the extent it is feasible, remain the same regardless of whether it is a normal situation or an extraordinary situation". Moreover, the OC keeps "its responsibility of

communication and coordination with the Incident Commander" (Politidirektoratet, 2011b, p. 113).

There are potential tensions and unanswered questions in the crisis preparedness guidelines concerning what role the CCG is expected to have: the guidelines emphasize that the shift to extraordinary operations should be made known for everyone *because* the shift is often gradual. But when do you then make the shift known? When the gradual shift starts, or when it is completed, or somewhere in between? And, what implications does the introduction of the CCG have for the functioning of the OC? The guidelines state that the role of the OC remains the same in extraordinary operations to the extent feasible, but what does this mean in practice? Establishing the CCG during a crisis will by definition represent an additional hierarchical level in the command structure, and there is reason to believe this will have consequences for the OC.

Limitations and weaknesses in the guidelines and the organizational design of the police more generally can be detected through practice. Moreover, repeated practice is necessary for the organizational structures to manifest themselves as formal normative structures (Egeberg, 1984; R. W. Scott & Davis, 2007), which is the focus in the next sub-chapter.

4.5.3 Sharp operations, the "shooting in progress"-procedure and the "duty to act"

The handbook for operative police personnel (Politidirektoratet, 2008a), i.e. all police officers involved directly or indirectly in operative police work, gives instructions on how operative police officers are expected to respond and act in sharp operations. In general, it states that: observation towards the scene, rather than finding an appropriate meeting point, should be prioritized; certified protective gear is to be used; and, radio discipline: only short and accurate messages (Politidirektoratet, 2008a, p. 45). Moreover, the planning and implementation of sharp operations is expected to take the following six steps: 1) Locate (where is the perpetrator[s], and safest way to engage); 2) Observe; 3) Isolate (block possible exit routes); 4) Evacuate (assess whether civilians should be evacuated or be kept at the scene, give them protection); 5) Negotiate; 6) Arrest / engage (Politidirektoratet, 2008a, pp. 46–47).

The aforementioned six-step procedure does however not come into play when the police receive reports of shots fired, or on-going shooting, in an area with civilians. In such situations, the police is expected to "do everything to stop the perpetrator(s) as soon as possible, to minimize the suffering of innocent third parties" (Politidirektoratet, 2008a, p. 47). This is the so-called "shooting in progress"-procedure, which was introduced in 2008 and tried to encompass the international experiences from school shootings, in particular the experiences from the U.S. (e.g. Columbine 1999, Virginia Tech 2007), where the evaluations emphasized the importance of proactive and swift response (NOU, 2012, pp. 326–327). The procedures state that the police, in "shooting in progress"-scenarios, must as soon as possible prepare to go to action. Thus, steps 1 to 5 in the six-step procedure are less of a priority. It is explicitly stated that "attempts to arrest the perpetrator(s) must be prioritized over the observation and isolation steps", "the evacuation phase is limited to the areas in near proximity to the perpetrator(s)", "the negotiation step is not relevant, but the police must actively try to make the perpetrator(s) end their actions" and "the Incident Commander shall try and use the most competent personnel in front when confronting the perpetrator(s)" (Politidirektoratet, 2008a, pp. 47–48).

Implicit in the "shooting in progress"-procedure is the so-called "duty to act", which is a legal principle emphasizing that police officers have a distinct responsibility, and thus duty to act, in situations where civilian lives are in imminent danger due to criminal acts or accidents (Myhrer, 2015, pp. 34–35; see also Auglend, 2015). However, this duty to respond is not explicitly stated in any laws, rules or regulations, but rather understood as an assumed duty based on the societal role and mission of the police. In other words, the duty to respond is based on a societal norm rather than being based on any particular laws, rules or regulations (Myhrer, 2015, p. 41; see also Jakhelln, 2012, pp. 5–7).

By contrast, the "duty to obey", i.e. the duty to obey orders given by superiors, is explicitly formulated in law. Act § 6-1 in *Politiinstruksen*, states that: "A police officer is obligated to obey orders from a superior unless the order is in any way illegal or is obviously irrelevant to the task at hand". In real situations, the duty to act and the duty to obey may come into conflict: for

instance, if a police officer detects civilians in great danger, while having standing orders to stay put.

Thus, taking action when responding to "shooting in progress"-incidents is associated with potential dilemmas for the police officers where there is not always a clear-cut answer to what is the "right" thing to do. I have highlighted the potential tension with the so-called duty to act and the norm prescribing that police officers are expected to follow orders from superiors. That "shooting in progress"-incidents are associated with dilemmas is not particular to the Norwegian police, but a general trait of such incidents, which is related to the sense of urgency and pervasive uncertainty that are defining characteristics of crisis incidents (Hermann, 1963; Rosenthal et al., 1989).

4.6 Crisis preparedness and coordination capacities at the national level

What capacities did the police have at the national level that were relevant in the event of a crisis? What were their respective goals and how did they function? By 2011, the police had four crisis preparedness capacities of relevance for the context of this thesis, which I will outline in the following: the crisis management unit in the POD established in 2001 (4.6.1); the national anti-terrorism police, Delta, and a national bomb team established in 1976 (4.6.2); an email-based national alarm system that was implemented in 2010 (4.6.3); air transport capacities, including the police helicopter services which were established in 2003 (4.6.4).

4.6.1 The POD as national crisis coordinator?

I have argued that the POD, since its establishment in 2001, struggled to find its role, because, among other things, it had a challenging mid-position subordinated to a detailed steering MoJ and superior to local commissioners accustomed to being highly autonomous in how they steer their police districts. Regarding the role as crisis coordinator on the national level I argued in 4.5.2 that there were ambiguities in the crisis preparedness guidelines on what role the

POD was expected to take in the event of a crisis. But there was also a discrepancy between the potentially significant role POD was assigned in the crisis preparedness guidelines and how responsive the POD's capacities were in practice.

To illustrate, the POD had an internal hotline that the police districts could call when affected by an extraordinary incident. The hotline was operated 24 hours a day. However, after office hours, incoming calls on the hotline were forwarded to the cell phone of one police officer in the POD, who was allotted a two-hour response time. This meant, in case of emergency, the officer on duty had to be at the headquarters of the POD within two hours after receiving the alert. Thus, the one in the POD that would be first alerted about a crisis was expected to be at the POD within two hours. Emergency practitioners often talk about the so-called "golden hour"[28] of emergencies. The basic point is that the first hour of the response is paramount. If a crisis were to occur after office hours in Norway, and the police officer at the crisis management unit in the POD, was not yet present at the POD after an hour it would be in accordance with existing procedures. I would argue this fact alone indicates that the POD de facto was not expected to take a proactive role in the immediate phase of a crisis.

According to the procedure for the Crisis Command Group (CCG) in the POD, the CCG was to be exercised twice a year. The POD's own evaluation of 22/7 found that central CCG members had been trained regularly, but the CCG as one joint unit had not been exercised and few had participated in formal CCG courses (Politidirektoratet, 2011a, p. 27).

4.6.2 Specialized national capacities under OPD's command

Although there are few national police agencies and none of them have crisis preparedness as their primary task, the Norwegian police have for a long time had police capacities specialized on crisis preparedness at the national level: the national anti-terrorism police unit (hereafter called Delta) and the bomb team.

[28] The term "golden hour" originates from trauma care where it is commonly used to characterize the urgent need for the care of trauma patients (Lerner & Moscati, 2001). Transferred to the context of this discussion I use the concept to emphasize the need for swift response when predatory crisis occur.

Formally they have been and still are under the command of the Oslo police district.

Delta (*Beredskapstroppen*) was created in 1976, in response to a crime development characterized by youth riots, hostage takings and hijacking of airplanes. Delta was, and still is, located in Oslo and formally organized as a national police capacity subordinated to the Oslo police district. This was done because the need of such capacities was considered to be biggest in the Oslo metropolitan area, and because the Oslo police district was considered competent to build such a national police capacity (NOU, 2017, p. 195). Unlike many of its international counterparts, Delta officers patrol as ordinary police officers half of their working hours (Stensønes, 2017), which resonates with the political goal of having a police with a civilian approach. Delta officers spend the remainder of their working hours on training and exercises.

The bomb team was created in 1978 with search and removal of explosives as its primary task. Akin to Delta, the bomb team was, and still is, located in Oslo and subordinated to the Oslo police district. Today the bomb team is specialized in assisting the police districts on terrorism, serious crime and preventive measures (NOU, 2017, pp. 195–196). Organizing Delta and the bomb team as national capacities subordinated to the Oslo police is another example of how the Oslo police has had a special role within the Norwegian police compared to the other police districts.

Despite being created as *national* police capacities, the establishment of Delta and the bomb team did not entail substantial changes in the vertical specialization of the police. This was because they were organized as sub-units in the Oslo police district. If a police district needs assistance from Delta and/or the bomb team, they send a request to the Oslo police district, which then forwards the request to Delta and/or the bomb team.

4.6.3 National email-based alarm system

In 2010, an email-based internal alarm system was implemented in the police. The goal was to enable swift alerts across functional and geographical boundaries and it could thus be a significant reinforcement of the crisis

coordination capacity of the police, but in practice it was not. Why this was so is explained in detail in the next chapter.

4.6.4 Aerial capacities

The police had three types of aerial capacities it could use in the 2000s: its own helicopter service, Bell helicopters from the 720 squad in the Armed Forces and Sea King rescue helicopters from the national rescue services. As its own helicopter service had no capacity to transport personnel, the police were very much dependent on other sectors when it came to aerial capacities.

It was, and is, primarily the national specialized police units such as Delta and the bomb team that need swift access to air transport. This is because they have nationwide coverage, but all located at the same location: Oslo. Thus, to fulfil the expectation to assist the police districts at short notice regardless of where in the country they are located they are dependent on swift air transport.

The police helicopter service[29]

The police helicopter service, as it developed in the 2000s, was primarily used for search, observation and surveillance (Metier, 2013, p. 15). Its capacity was increased in 2003 onwards, but shifted to reductions from 2007.

June 1995 was the first time the question of establishing a helicopter service within the police was discussed in the parliament. Up until then, the police had rented aerial capacities from private suppliers when such were needed. After a trial period in 1997–1999 and an evaluation, the government concluded that hiring-upon-request was the best option. The parliament however, came to a different conclusion, and decided that a helicopter service would be established in the police by 2003. The parliament further demanded: that the helicopter service would be operative 24–7 with national coverage, that a back-up helicopter had to be established, that the helicopters would be operated by police pilots, and that a helicopter base would be established in Oslo at some point (NOU, 2012, p. 291; cf. Innst. S. nr. 155 (2001–2002)).

[29] This section builds extensively on chapter 12 in the report by the 22 July Commission.

The POD followed up the demands from the parliament and a police helicopter service was gradually established. It was operative 24–7 and staffed with six crews each consisting of one pilot and two operators. Following an evaluation in 2006 initiated by the POD, MoJ suggested to the parliament to make changes in the existing demands. In the subsequent process, which involved MoJ and POD, it was decided that the requirement of police pilots was dropped and that the further requirements to response and preparedness for the police helicopter service would be decided by the POD, in dialogue with the Oslo police district. Moreover, that this decision would be based on police operative needs. In the beginning of its operation the helicopter service was financed via dedicated funds but was later integrated as part of the general budget to the Oslo police.

From 2007 to 2011 the capacity of the police helicopter service was gradually reduced. In 2007/08 the POD ordered the Oslo police to cut 5 million NOK on its helicopter service, and in September 2010 it was decided to end the contract with the back-up helicopter, which increased the time the police helicopter service de facto was unavailable. The decision was taken in a meeting where the commissioner of the Oslo police, POD and MoJ participated.

In the same year the police were obliged by contract to buy the helicopters. The price was 30 million NOK. This was initially meant to be paid by MoJ, but in the Oslo police's budget for 2010, the MoJ had not given any extra money to buy the police helicopter. Thus, the Oslo police had to "find" the money in its ordinary budget, which led to a further reduction in the capacity of the helicopter service, including keeping the helicopter service closed during the summer holidays. POD and MoJ was informed about the measures taken by the Oslo police; no compensating measures were initiated. Thus, in practice POD and MoJ approved the decisions taken by the Oslo police. In 2010 the availability of the police helicopter was reduced to approximately 55 percent (NOU, 2012, p. 293). This "new" practice of having the police helicopter service closed during the summer holiday was repeated in 2011, which meant it also was closed on 22 July, 2011 – all the pilots were thus on holiday.

Helicopter support from the Armed Forces

As the police helicopter was not equipped for transporting operative police personnel, the police have been dependent on assistance from elsewhere, first and foremost the Armed Forces. Requesting assistance from the Armed Forces is regulated in the Assistance act (*Bistandsinstruksen*), which inter alia states that assistance in armed operations has to be politically approved before it can be implemented, cf. § 15 and 16 in the Assistance Act of 2003, which is the one that applied on 22/7 (Hjellum, 2018).

The premier transport option for the police has been the 720 squadron, and its Bell Helicopters. Delta and the 720 squadron have had joint exercises annually. The Bell helicopters can be used for transporting police personnel as well as a shooting platform. Parts of the 720 squadron also functioned as a national counter-terrorism capacity available for the police on request with a two-hour response time.

This changed in 2009, because some of the capacities were redirected to participate in operations in Afghanistan. The consequence was that the Armed Forces no longer had capacity to maintain a two-hour response time on its helicopters to the police (NOU, 2012, pp. 246, 455). In an internal government document of 20 February 2009, it was stated that the government would try and mitigate the negative consequences of extending its operations in Afghanistan. In August, the same year, the Ministry of Justice (MoJ) sent a letter to the Ministry of Defence (MoD) asking MoD to consider alternatives to the 720 squadron such as the Sea King rescue helicopter service, because the police can no longer rely on the 720 squadron as an aerial capacity in the event of terrorist attacks. The response from MoD was negative, it had no alternatives that were relevant (NOU, 2012, p. 292).

It is the Norwegian Air Force that has the responsibility for the Sea-King rescue helicopters that are the aerial capacity in the national rescue service. In principle, the Sea King helicopters can function as an aerial capacity for the police, because they can be used to transport (police) personnel from location A to B. However, it is not a very reliable capacity for the police. The reason is that requests from the police have status as third priority. The primary task and thus

priority for the Sea King Helicopter service is search and rescue operations. Its second priority is air ambulance service. If there is a shooting in progress-situation and Delta or others in the police are dependent on air transport, the Sea King helicopters are still not a reliable capacity. The reason is simple, in shooting in progress-situations it is likely that the Sea King Helicopters also will be requested for search and rescue operations and/or air ambulance transport. As the department director of the Joint Rescue Coordination Center South-Norway (responsible for coordinating the Sea King helicopters) stated in an interview in 2013, "It is a question of how many times one can allocate one and the same capacity. The probability that these assignments will coincide in time is quite high. The police should therefore be careful about relying on this capacity [Sea King helicopter] in a sharp situation" (Mortvedt, 2013b).

4.6.5 Summary

In the 2000s the police had two capacities at the national level that in practice could play a significant role in the immediate phase of a crisis incident and that was Delta and the bomb team. However, they had no reliable air transport capacity available from 2009 onwards. Thus, their possibilities to swiftly respond to any crisis incident distant from Oslo were limited. Moreover, Delta and the bomb team is a specialized capacity that can assist the local police districts at the operative level. They are not expected to take any coordinating role towards the police districts. The POD could in principle do this, but a hotline operated by one officer with a two hour response time can hardly qualify as a national coordinator in the event of a crisis.

4.7 Crisis preparedness and coordination capacities at the local level

I now turn to the crisis preparedness and coordination capacities at the local level. The local police districts have their own specialized crisis preparedness capacity, the UEH-units which I describe in the next section (4.7.1). I then turn to the operative and intermediate level respectively, outlining their role

according to the crisis preparedness guidelines and their extent of operative training and exercises. First, the operative personnel (4.7.2), then the operators and the Operation Commanders who work at the Operation Centers (4.7.3), and finally, the Crisis Command Group and its members (4.7.4), who are expected to take over the command at the intermediate level in the event of a crisis (cf. 4.5.2). The strategic level with the Commissioner and her/his leader group is not included, because it does not have a central role in the initial phases of crises. The information processing capacity at the local level is outlined in the next sub-chapter.

4.7.1 Specialized capacities at the local level: The UEH-units

In 1985, the Government Security Committee (*Regjeringens sikkerhetsutvalg*) decided to establish special task units in many police districts (UEH, *Utrykningsenheten*). The police officers in the UEH-units were given specialized training in handling terrorist attacks and sabotages, in bodyguard services and in securing vital objects under threat (St.Meld. nr. 22 (2000-2001), p. 302). Thus, the first measure to build specialized police capacities on crisis preparedness at the local level was taken 25 years before 22/7, and "completed" in 1994 when it was decided that there would be a UEH-unit in all police districts.[30]

The UEH-units have special functions such as snipers and bodyguards, and they have access to more advanced equipment than ordinary police officers, such as heavy shields and armored vehicles. The establishment of a UEH-unit in all police districts undoubtedly increased their crisis preparedness capacity. However, the UEH-units were established without defining a preparedness level to their services, i.e. defining a threshold of how many UEH-officers had to be on duty, or available within a fixed time. No formal requirements were set by the national level to ensure that the police districts had a sizeable UEH-unit with a set response time twenty-four-seven, seven days a week. Thus, in practice, it was up to the local commissioners to determine the size of its UEH-unit, and at what hours it would operate and be available for the police district.

[30] Cf. *Tjenestereglement for operativt personell i politiet*.

4.7.2 The operative police personnel

The operative police personnel in Norway are divided into five categories ("IP categories"), based on the amount of annual operative training in handling armed assignments and their place of assignment, cf. table 4.3.

Table 4.3: Extent of operative training for the respective IP-categories

IP-category	Annual training	Type of police officer
1	50 % of their working hours	Delta
2	>103 hours*	Bodyguard-services
3	103 hours	UEH-units
4	40 hours	Other officers certified to carry weapons
5	<40 hours	Officers with adjusted training

*The guidelines do not state the extent of training the bodyguard-services get, except that it is more than IP3-personnel.

The police districts consist of police officers in category 3, 4 and 5. Prior to 22/7 police officers in category 3 and 4 spent 103 and 40 hours per year, respectively, on training and exercises. The police officers in category 3 are the personnel working in the local UEH-units. Police officers in category 5 have not completed the 40 hour training program necessary to be approved for taking part in armed operations, but can participate in other operative police work (Politidirektoratet, 2008c).

In 75 percent of the incidents that the police handle, the operation involves only one police unit, and only ten percent of the incidents involve more than two police units (NOU, 2012, p. 324). In other words, the operative police personnel get limited experience from real incidents in coordinating their actions with other police units. The lack of relevant experience from their everyday work reinforces the need for relevant training and exercises.

It is hard to give a clear-cut answer on how much training is needed to develop and maintain practices relevant for crisis situations. However, it is worth mentioning that Oslo police district in 2000 decided to increase the number of days on operative training for their category 4 police officers from 40 to 80 hours

of annual training.[31] In a recent master's thesis study on the "duty to act", seven police leaders and officers with various operative training were interviewed. Common for the interviewees was that they all felt a tension between the duty to act and that there were certain situations they felt they were not prepared to handle due to a lack of competence and training (Bergh Herjuaune, 2014, pp. 31–37).

4.7.3 The operators and Operations Commanders

The crisis preparedness guidelines describes the Operations Center (OC) as the "management and coordination central" and "an important coordinating unit in the police district" (Politidirektoratet, 2011b, p. 110). With this in mind it is puzzling how little attention the OCs were given from the national level throughout the 2000s on issues such as the level of staffing, building a competent staff, developing standardized procedures for prioritizing of operations and how to handle them – all factors considered important to ensure high quality in the actions and practices enacted at the OCs (cf. Torkildsen, 2013, p. 5). Consequently, it was in practice up to the local commissioners whether to prioritize these factors or not.

Regarding the level of staffing at the OCs, no minimum requirements were set by MoJ or the POD. As a pilot study for the "Change program" (*Endringsprogrammet*) issued by the POD upon 22/7, a group of police officers studied the current status at the Operation Centers regarding competence. The study was conducted in October 2012, more than one year after 22/7, and found that nine out of the 27 police districts had only one operator on duty at the OC on parts of the weekdays and in the weekends. In practice, this person would then function both as Operations Commander and operator. Another 13 of the total 27 police districts had the OC staffed with only two people on parts of the week and the weekend (NOU, 2013, p. 178). According to representatives from the strategic level in the POD, the level of staffing at the OCs is the responsibility of the local commissioners (Politidirektoratet, 2011a, p. 21).

[31] The increase in operative training was made by correspondingly reducing the number of hours dedicated to other types of training (The Oslo police, 2018, June 26, correspondence with author).

At the same time, it should be emphasized that the 27 police districts vary greatly in topography, demography and level and types of crimes they have to handle. That being said, it is impossible for an OC staffed with one person to operate adequately if an incident escalates, if two minor incidents occur at the same time or if an extraordinary incident occurs. As stated in the crisis preparedness guidelines of 2011: "One intention of the role and function of the Operations Commander is that she/he can assess the situation from a distance, unaffected by the intensity of the police operations" (Politidirektoratet, 2011b, p. 111). But how can the Operations Commander make assessments "unaffected" by the intensity of the on-going operations if there is only one, or no, operator to assist. The OC is expected to handle a myriad of tasks including answering incoming calls, alerting superiors, mobilizing necessary police capacities, communicating with the Incident Commander, coordinating the operative personnel, monitoring the radio communication and coordinating the police operation with the other emergency agencies when necessary.

No formal competence criteria existed prescribing who was eligible to work as operators and Operations Commanders at the OCs, except having completed the general police education. Until 2010, there were no formal courses offered by the Norwegian Police University College directed at the Operations Commander function. In practice it was up to the police districts whether they would set any competence criteria and/or facilitate training and exercises. Another five years passed before a course directed at the operator function was established at the Norwegian Police University College.

A recent study of the extent of education and training among operators at the OCs found that while the extent of informal exchange of experiences among peers happened on a regular basis, organized training and exercises rarely happened, cf. table 4.4 (Torkildsen, 2013).

Table 4.4: Frequency of training and exercises among operators (in percent).[32]

How often…	Once a week or more	Once a month	Once every 3/6 months	Once a year or less
..do you discuss challenging operative scenarios with colleagues?	59	23	13	7
..do you use vacant working hours to discuss methods to solve operative incidents, in a learning perspective – upon an incident?	48	26	13	12
..is working methods upon receiving incoming messages discussed?	40	17	13	30
..do you use mental training to develop response patterns when receiving incoming messages?	34	13	7	47
..do you have formalised internal meetings/briefings at the OC to learn from/share experiences?	23	22	25	30
..do you have exercises with the operative personnel?	-	6	46	48
..do you have tabletop-exercises?	-	4	26	69
..do you have full-scale exercises where all levels participate?	-	-	23	76

N – 541.

About half of the respondents had participated once a year or less in an exercise with operative personnel. Moreover, about 75 percent had participated in a tabletop- or full-scale exercise once a year or less. On the positive side, the numbers indicate that about half of the respondents take part in formalised internal meetings/briefings to learn from and share experiences on a weekly/monthly basis. Moreover, more than half of the operators reported that they discussed scenarios, methods and experiences with peers on a weekly/monthly basis.

These patterns are corroborated by my interviews with seven operators and operations commanders, from the Oslo and Nordre Buskerud police respectively (O 7, 9-12; NB 10 and 11). For years, the Oslo police have had a mandatory training programme for new operators (in 2010 it was of three weeks

[32] The table is a simplified version of a table in Torkildsen (2013, p. 40). The numbers are based on a questionnaire distributed to everyone who was employed at the OCs; 63 percent of all employees responded (Torkildsen, 2013, p. 31).

duration), followed by a trial period with a mentor. Training and exercises that included the operative level and/or the CCG-function were almost non-existent, except for the annual local rescue exercises (*LRS-øvelse*) that is mandatory for all police districts, and the annual national full-scale exercises that were introduced in 2007 (explained in 4.9). And, at these annual exercises, there is only a limited number of police personnel that take part. Thus, it would take many years before everyone working at the Operation Center in a police district would have participated in one of those exercises. Moreover, as one of the interviewees pinpointed, when the operative personnel had exercises, which involved a command post and incident commandment at the incident scene, the OC-function would typically be played by one of the course instructors (O 7).

More generally, the POD has given little guidance on defining what an OC is, what the task portfolio of an OC is, how the work at an OC is expected to be organized and how it is expected to solve its tasks (Heidenstrøm, 2015, pp. 288–289). According to the interviewees I talked to on the issue, the absence of general guidelines resulted in diverging standards and practices in the different police districts (O 3, 5, 7; NB 4, 11; POD 2, 5; SB 6; F 1, 2).

Their statements are corroborated by the fact that prior to 22/7 the OCs in the different police districts differed in how they classified and prioritized incoming calls depending on the state of emergency. While some police districts had developed classification schemes,[33] the number of levels and their level of detail differed. Some police districts had not developed any classification scheme at all (NOU, 2013). In the 2012-study of the Operation Centers, 62 percent of the respondents said they did not use any such classification scheme at their OC (Torkildsen, 2013, p. 41). This is in stark contrast to the crisis preparedness guidelines' emphasis that the leadership at the intermediate and operative level in the police districts must follow the same guidelines (Politidirektoratet, 2011b, pp. 32–34).

[33] Here is one hypothetical example of a classification scheme with three levels to illustrate what I mean by the term: 1. *Alarm* – human lives at risk, dispatch all units to the rescue; 2. *Urgent* – critical incident that could escalate, dispatch units to the rescue; 3. *Relevant* – incident with minor risk potential, dispatch unit(s) if available.

Another example of diverging practices at the OCs is how, and what, information from phone callers are registered in the police operative log system (PO-log). In the Oslo police it has been established practice for years to register information in real time, i.e. register as much as you can during the call by typing on the keyboard. In other police districts, including the Nordre Buskerud police, the tradition has been to take handwritten notes, and then, when you have time, go through your handwritten notes and register it in the PO-log (Trædal, 2017; NB 11). Furthermore, several studies have found that what the operators decide to register in the PO-log varies between the police districts (Haugland, 2015; Lundgaard, forthcoming).

A final indication of the limited attention devoted to the OCs and their staff is the coverage the OCs are given in the crisis preparedness guidelines. The first edition of the guidelines made in 2007 consisted of 16 chapters over 210 pages. The CCG and Incident commandment at the incident scene both have their own chapter, while the Operations Commander function was described on less than a page and the OC was only described in relation to other functions. In the revised version of the crisis preparedness guidelines published June, 2011, management and command at the OC had an own chapter.

To summarize, what is most striking is the significant discrepancy between how the Operations Center is described in the 2011-version of the crisis preparedness guidelines and the limited attention the operators, Operation Commanders and the Operation Centers as such, have been given by the POD and the top leadership in the police districts. The terms "Operations center" (*operasjonssentral*) and "Operations Commander" (*operasjonsleder*) are fairly new and were introduced with the *Police Reform 2000* (Torkildsen, 2013, p. 10). The changes in coverage given to the OC and command and management at the intermediate level that eventually gradually emerged can be seen as an indication of a gradually increased awareness of the OC at the higher echelons in the police in the years prior to 22/7.

4.7.4 The Crisis Command Group (CCG)

The CCG as organizing concept is fairly new in the Norwegian police. The first handbook in CCG command and leadership in the police came in 1988 and was

strongly inspired by how the function is organized in the Armed Forces (Rosø & Torkildsen, 2015, pp. 305–306).

According to Rosø and Torkildsen (2015, p. 309), recruitment to the CCG-functions was in the 1990s based on recruitment from formal leader positions in the police districts; "many got the roles for long and loyal service and few, if any, assessments of suitability were conducted". They assert that there was a "gradual change" following *Police Reform 2000*. More generally, Rosø and Torkildsen argue there were given no formal demands or signals from national authorities of what was expected from the police districts concerning their CCG and crisis management, hereunder formal competence. However, the POD had set an expectation that the CCG was expected to be capable of establishing itself within two hours upon request (NOU, 2012, p. 95).

In the 1990s and early 2000s the Police University College offered customized courses to the respective police districts on the local Commissioners request. Thus, no request, no course. Moreover, due to limited capacity, the Police University College could only offer courses to four police districts per year, which means at least six years passed between each time the same police district could participate. The long time interval between each time the respective police districts could attend the course combined with relatively high turnover in the CCG-functions meant they in practice "had to start from scratch" every time the course was held, according to two of the course instructors (PUC 1 and 2).

Akin to the OCs, MoJ and POD set no criteria or expectations to the police districts regarding the CCG. Consequently, it was up to the local commissioners to decide how to organize and staff the CCG, and how to train and conduct exercises. More generally, how to develop the CCGs was left to the discretion of the local commissioners. Thus, ultimately, it was a question of economic resources and priorities. As a leader in one police district put it, "If we send personnel on exercises, they have to be covered for. And we do not have the economy to do so. Therefore, we keep the level of exercises at a minimum" (NB 6).

The lack of training and exercise can to some extent be compensated for if the everyday work offers frequent opportunities to practice the CCG and the shift from normal to CCG command structure. However, my data material indicates that the opportunities were limited in the years preceding 22/7. First, there have in general been few predatory crises putting the respective police districts on tough tests (cf. 4.3.2).

Second, the Oslo and Nordre Buskerud police districts had limited experience with establishing the CCG. In the five years prior to 22/7, the Oslo police had established the CCG on six occasions and three times as part of an exercise, but *never* in response to unexpected incidents.[34] When established, it was typically in response to special events that demanded much police capacity over a longer period of time, for example the visit by U.S. president Obama in 2009 and the official visit by the Russian prime minister in 2010. The big difference between 22/7 and this type of incidents is that the latter were known in advance. Thus, the Oslo police had ample time to plan and prepare for the establishment of its CCG and the transition from normal command structure to CCG command structure on the aforementioned occasions. This was not the case on 22/7.

The Nordre Buskerud police had experience with establishing the CCG in the years prior to 22/7, but the interviewees differ on how established and well-known the CCG and the CCG command structure was among the police personnel. According to the CCG Commander on 22/7, the Nordre Buskerud police established CCG often. By contrast, some of the incumbents of the CCG-functions felt that too few exercises were arranged, and that they did not feel confident in their roles as leaders of their respective CCG functions (Nordre Buskerud Politidistrikt, 2011, p. 32).

4.7.5 Summary

Simply put, the operative personnel received operative training, while those at the intermediate level did not. The police districts had operative personnel that had more operative training than the ordinary police personnel, the UEH-units.

[34] The Oslo police (2016, Oct 5), email correspondence with author.

However, there were no fixed requirements that ensured a 24-7 staffing of personnel from the UEH-units. There were also training requirements for the operative police personnel, while their daily operations rarely involved interactions with other police units.

Three characteristics are prevalent regarding the OC and the CCG: i) they are expected to take a significant coordinating role in the event of crises; ii) there have been hardly any formal requirements from the national level regarding their competence, organizing and training, which consequently has left up to the local commissioners; iii) training and exercises for those at the intermediate level has varied between the police districts, and most of their training has not involved other actors or hierarchical levels.

4.8 Information processing capacity

In chapter 2, I argued that the *information processing capacity,* i.e. how much information the police organization can process, has implications for when and how information-couplings will occur during a crisis response. In the following, I describe the material dimension of the information processing capacity in the police districts in the 2000s, i.e. the characteristics and functionality of the central information channels which were: the police operative system, the phone lines at the operations centers and the police radio. A general pattern is that the material structure of the channels for information sharing reinforce the decentralized silo structure, because the police districts had no capacities that enabled swift inter-organizational information sharing, except the telephone.

4.8.1 The police operative system (PO-log)

Information on on-going operations is logged and registered in the police operative system (hereafter PO-log). The PO-log is an electronic system the Norwegian police use for their operative services and tasks. It contains information with a police operative objective, primarily on organization and execution of the police operations at the operative level. It gives a continuous overview of the present situation in the police district, including available personnel, relevant tasks and priorities. However, each police district has its own PO-log and in the 2000s the PO-logs were in practice not accessible for police

officers from other police districts. As an experienced operations commander from the Oslo police explains: “You could maybe have access [to the PO-log of adjacent police districts], but then you needed to remember your password” (O 7). You needed user access and a personal password. This could only be done by someone working in that police district. Moreover, if you did not log in within a two- or three-month period you would lose your access. As the operations commander recalls it, “[access to the PO-log of other police districts] was always associated with a lot of problems”.

When answering incoming calls, the operators have to decode the messages the caller communicates and concomitantly assess if there is any information that should be registered in the PO-log. It is not possible to change or delete existing registrations in the PO-log, but the operators can correct any wrong or ambiguous registrations by adding more lines of text to existing registrations. The PO-log is first and foremost a working device for the operative personnel in real time. the Oslo police has described the registrations in the PO-log primarily as a “here and now”-product (Oslo Politidistrikt, 2012b). The PO-log system was created for the Winter Olympics at Lillehammer in 1994, but it was not before 2003 that the PO-log was implemented in all police districts (NOU, 2012, p. 151). Since then, the PO-log has been subject to many minor revisions and updates, but this has primarily been changes within the existing technological infrastructure, not changes in the actual infrastructure (Skaret, 2009).

4.8.2 The phone lines at the Operations centers

The operations centers function as the information and coordination nodes in the emergency response network. The OC receives all incoming calls in the police district, both from civilians, other police districts, police agencies and other emergency agencies.

The functionality of the phone lines at the OCs in the 2000s had several limitations, which reduced their information processing capacity. For starters, no function for redirecting unanswered calls was established, i.e. the operation centers could not redirect incoming calls to other police districts, nor could they relieve adjacent police districts by answering incoming calls on their behalf if

they experienced long queues of incoming calls, which is a common scenario in the event of a crisis. This seems in retrospect odd as it was technically feasible to develop such a function within the system that existed at the time (PDMT, 2011, pp. 3–4).

The technical solutions varied between the police districts. The Oslo OC had ten operator desks, including one for the Operations Commander, and can have 60 pending emergency calls simultaneously in a joint queue (NOU, 2012, p. 166). Therefore, it is primarily the number of operators on duty, not the material structures, which condition how many incoming calls the Oslo OC can handle. The operators get the queue of incoming calls visualized on one of their computer screens, and a colour code system indicate what type of call the respective incoming calls are. Red line is emergency call, blue is police, white is pre-hospital emergency and so on. The emergency agencies and adjacent police districts have prioritized lines in to the OC, but they have a lower priority than emergency calls.

The functionality of the phone lines at the Nordre Buskerud OC was limited compared to the Oslo OC. Part of the explanation is that the Nordre Buskerud police had not yet been included in the new digital multi-agency public safety network that was implemented in 2010 (discussed below). The phone line at the Nordre Buskerud OC had two analog channels for emergency calls with no system for re-routing if both channels were already occupied. Thus, if there was a third incoming call, the caller would simply get an occupied signal (NOU, 2012, p. 167). This also meant that it was impossible for the Nordre Buskerud operators to prioritize between the incoming calls, and thus difficult to know if adjacent police districts or other emergency agencies were trying to get in contact with them.

4.8.3 A fragmented radio communication system

Historically, the radio communication system among the Norwegian emergency agencies has been highly fragmented. The police, the FRS and the pre-hospital emergency agency have operated on separate analog radio systems. Furthermore, within the police, each police district has operated on its own radio frequency. The Police Reform 2000 and the reduction from 54 to 27 police districts resulted

in a need to change the infrastructure of the radio communication in the police districts. Calls for a new police radio system intensified. However, most revisions were still done by tweaking the existing systems (Skaret, 2009, Chapter 13 and 14).

After nearly ten years of policy analysis and discussions of different alternatives, the parliament decided in 2004 that the Ministry of Justice could collect tenders on the establishment of a digital nationwide multi-agency communication network for the emergency agencies. The parliament also decided that the implementation would proceed in two phases. In the first phase the new digital network would be implemented in one delineated geographical area. Then, the first phase would be evaluated, before the second phase, which was to implement the digital network in the rest of the country, could start. In June, 2010, the first phase was completed. Six police districts were included in the first phase (Nødnett, 2018; Skaret 2009, pp. 336-339).

The new digital nationwide multi-agency communication network was an encrypted digital network that had better functionality, coverage and capacity compared to the existing analog networks the respective emergency agencies had. The Oslo police was included in the first phase, while the Nordre Buskerud police was not. As we will see in chapter 9 on police operation Utøya, the fact that the Nordre Buskerud police was not included in the new digital radio network, exacerbated the challenge of information sharing between the Nordre Buskerud police and the other police districts.

4.9 Crisis preparedness and coordination in practice

In this sub-chapter I describe how the design of crisis preparedness and crisis coordination capacities functioned in practice in the 2000s up until 22/7. I focus on the actors most relevant for the scope of this thesis: operative police personnel, the OC, the CCG and to what extent horizontal and vertical inter-organizational crisis coordination was practiced and exercised.

4.9.1 Response time

The Norwegian police did not use response time as a goal or benchmark on own performance prior to 22/7. In 2007, MoJ asked POD to assess whether any standards for expected response time should be set, and what consequences any potential changes would have. Based on an analysis of the response time in five police districts, the POD concluded that the response time in general was "acceptable". Moreover, the POD asserted that response time as a performance benchmark was inappropriate, because there was a risk that those incidents that could be swiftly responded to would be prioritized over other incidents that potentially were equally important (Politidirektoratet, 2008b, pp. 55–57). The POD also asserted that introducing response time as a benchmark would imply investments in operative data software that enabled such benchmarking. An overall point stressed by the POD was that the critical challenge was not the response time, but the ratio between available police units and the number of pending operations that require immediate response. Thus, the crucial factor was the level of staffing, not setting a fixed response time.

4.9.2 Limited inter-organizational coordination

All interviewees I talked with regarding inter-organizational coordination emphasized that police work historically has happened within the respective police districts – full stop.[35] When asked why, many pointed to the absence of any experienced need for crisis coordination between police districts. Prior to 22/7 there had been few, if any, crises that put the capacity of the affected police district to an extreme test. Many also emphasized that having a decentralized police has been a strong norm in the Norwegian society for decades (cf. 4.3). As an experienced leader from one police district put it, "We [the police districts] assist each other when there is a need. To what extent we have contact beyond that is ultimately up to the commissioners" (SB 6).

In 2006, "Exercise Oslo" was held. It was the biggest civilian rescue exercise in Norway and involved all the emergency agencies and more. Inspired

[35] By "All interviewees I talked with on the issue…", I mean all interviewees I interviewed about how crisis coordination was structured and practiced in the 2000s; see the appendix for an exhaustive list.

by the terror bombings in Madrid (2003) and London (2004), the scenario was a series of three bomb attacks on the public transport system in Oslo within a time span of 40 minutes, followed by a train stop many hours later possibly related to the bomb attacks. The evaluation of the exercise concluded that "information sharing was a key factor (…) The vast majority of actors missed better access to information as foundation for developing their situational awareness". This was the case on "all levels" and the information that was shared was sometimes "experienced as limited and ambiguous" and an information vacuum emerged in the initial phase, most notably at the strategic level (DSB, 2009, pp. 5, 23).

The following year, the POD launched the *Øvelse Tyr* concept which is an annual national full-scale exercise focusing on search and rescue, natural disasters and terrorist attacks where all levels in the command structure at both national and local level participate. Øvelse Tyr gave the police an opportunity to exercise crisis coordination between the national and local level. However, each year it was only one police district that was exercised, and only a group of people at that particular police district was involved. This is not extraordinary; my point is simply that such exercises must have some regularity if everyone is to benefit from the exercises through actual participation. Participants from other police districts could participate as observers if interested. This means that while the national level exercised the crisis coordination between the national and local level annually, this was not the case for all the 27 police districts. In practice, it would take 27 years between each time the police districts took active part in the exercise. Moreover, as the exercise was held at one police district, horizontal coordination across police districts was not exercised.

In 2010, the POD initiated a three-day seminar where participants from collaborating partners (MoJ, Ministry of Foreign Affairs, the Oslo police, the police intelligence agency and the Norwegian Military Academy) participated. The seminar ended with a CCG exercise where all CCG functions were tested. The seminar in 2010 was the first of its kind (Politidirektoratet, 2011a, pp. 26–27).

4.9.3 Mistakes, loyalty and the duty to act

In chapter 2.5 I argued that building skills in improvisation and bricolage, and an experimental culture that allows competent mistakes, helps induce crisis coordination capacity. A relevant question is therefore whether the Norwegian police in the 2000s practiced an experimental culture, and whether it had procedures to learn from previous crisis responses and exercises. There are no clear-cut answers to these questions, partly because these are complex questions, and partly because the evidence is limited and offers mixed results.

Existing research on operative police work in Norway provides mixed evidence on whether there is a culture that allows for competent mistakes. In a doctoral study of loyalty and professionalism among middle-managers in the police, one of the findings from the field observations was that fear of making mistakes was a recurring theme among the middle-managers, and they acknowledged that the fear was common among police officers (T. D. Valland, 2015, Chapter 5). However, it varied between the informants what they meant by it, and what type of mistakes they feared making. A survey distributed to operative personnel in four police districts in 2008 yields more positive findings (*N* 914, response rate 83 %). When asked to what extent they felt there was room to make mistakes at their unit without experiencing negative consequences, 10 percent said "to a lesser extent", 64 percent said "to some extent" and 26 percent said "to a large extent". The results are difficult to interpret because the meaning of the middle category "to some extent", which 64 percent answered, is quite ambiguous. When asked to what extent they had abstained from certain tasks because they were afraid of making mistakes, 52 percent of the respondents answered, "not at all", 36 percent answered "to a lesser extent" and only eleven percent answered "to some extent". Seen in combination, the results indicate that any fear of making mistakes has minor practical implications (Wathne, Finstad, & Drange, 2008, pp. 96–97). In a doctoral study of factors affecting self-initiated operations by operative police officers, the respondents reported they felt they had substantial discretionary power to make priorities based on own assessments when out on patrol. They felt they were only to a little extent governed by leaders higher up in the hierarchy (Hellesø-Knutsen, 2013).

One potential tension in the operative police work is the relation between loyalty and the so-called "duty to act" (Auglend, 2015; Myhrer, 2015). Loyalty is here understood as compliance with command and control. The duty to act is understood as the individual obligation every police officer has to take action when civilian lives are in danger. A study of police leaders and officers understanding of the "shooting in progress"-procedure, found that the interviewees differed on whether the duty to act could be breached or not. The interviewees emphasized that when responding to extraordinary incidents, the duty to act could potentially come in conflict with other professional norms such as obeying the orders of your superiors and maintaining your own and your peers' safety (Bergh Herjuaune, 2014). The importance of operative experience for being confident in the decisions you make was also emphasized. This latter finding is corroborated by another study of operative decision-making by Norwegian police officers in sharp operations. A main finding from this study was that the operative decision-making is based on intuition and what the authors call the "gut-feeling", which stems from previous experiences in similar situations (P. I. Olsen & Sjøtrø, 2015). This is very much in line with cognitive psychology research, which has demonstrated that much of human interaction is based on intuition and heuristics (Kahneman, 2011). One basic point to draw from this is that much of the operative decision-making in sharp operations is based on intuition, which again is based on previous experiences, and that what following the "duty to act" implies in sharp operations is not always self-evident.

4.9.4 Extraordinary incidents and exercises: Briefed, not evaluated

There is consensus in the literature that crisis-induced learning, defined as "determining the causes of a crisis, assessing the strengths and weaknesses of the responses to it, and undertaking remedial action based on this understanding" (Boin et al., 2016, p. 16) is hard (Broekema, 2016, p. 382; Dekker & Hansén, 2004, p. 212; Moynihan, 2008, p. 351). The existing research and evaluations on crisis-induced learning in the Norwegian police suggest that the Norwegian police is no exception to the general pattern.

There has been conducted one study of the police's evaluation of extraordinary incidents, which included analysis of several evaluation reports

and a survey distributed to the leaders of all 27 local UEH-units and four other police leaders with extensive operative experience (Jonassen, 2010). All respondents answered the survey. The main findings of the study were that extraordinary incidents rarely are evaluated, and when they are, the evaluations are not very systematic. Who leads the evaluation and who is present varies. Tactical debriefs are more common than evaluations, and there is little written documentation that enables diffusion of the knowledge to others than those present at the discussions and briefings.

The finding is corroborated by a simple analysis I conducted of the evaluation reports from the annual rescue exercises in the Oslo police 2005–10. The reports of 2005–08 entailed few specific, if any, points to be followed-up. The 2009-report included an own section with follow-up points and also specified whose responsibility it was to follow up.

In 2009, the POD evaluated a series of larger exercises from the 1990s and 2000s where the police had a central role. The evaluation concluded that the experiences and lessons learned from these exercises "have in limited and varying degree become 'joint property' for others than the participants in the respective exercises" (Politidirektoratet, 2009, p. 5).

The crucial success factors in the exercises identified by the evaluation was: the competence of the operators, operations commanders, Incident Commanders and CCG-members; the organizing of the crisis command (i.e. the operations center and the CCG); the use of technology and ICT-systems; the understanding of the local rescue management; satisfactory physical facilities for the Operations Center and the CCG-functions; and, that the need for information seemed underestimated or "deprioritized" in the exercises (Politidirektoratet, 2009, p. 6). These observations of the importance of the Operations Center, the Crisis Command Group and the competence of those working there combined with my earlier points on the limited focus that has been given to the very same issues by the leaders in the police districts, the POD, MOJ and the Police university college (cf. 4.7), reinforce the finding that findings from exercises were not followed up.

The empirical evidence suggests that learning points from exercises have not been followed-up significantly. Many of the weaknesses detected in the exercises have been recurring with seemingly few signs of significant change. The data material I have collected does not give clear indications of why this has been a problem, but one modest and probable explanatory factor is a lack of prioritizing the issue by the commissioners and the leadership in the police districts and by the POD.

4.10 Building crisis preparedness and coordination capacities in a decentralized silo structure

The heading of 4.10 summarizes several recurring themes in my analysis of the crisis preparedness and coordination in the 2000s in the Norwegian police. Except Delta and the bomb team, there were no significant crisis preparedness or crisis coordination capacities at the national level. There was little inter-organizational crisis coordination between the national and the local level, and between the police districts. There was also limited training and exercising of crisis coordination across hierarchical levels within the respective police districts. Furthermore, the national level gave few instructions and requirements to the police districts regarding crisis preparedness. This latter point must be seen in relation to the detailed political steering biased towards other issues than crisis preparedness, which the POD was subject to by MoJ.

At the same time, it should be mentioned that measures to increase the crisis preparedness and coordination capacity of the police were taken in the 2000s, as the timeline in table 4.5 illustrates. The timeline is not exhaustive, but gives an overview of when the respective measures, discussed in this chapter, were implemented.

Table 4.5: Timeline of implemented crisis preparedness measures.

Year	What?
1976	The national anti-terrorism unit (Delta) and the bomb team established
1985	UEH-units established in some police districts
1994	UEH-units in all police districts
2001	POD established
2002	The concept and function "Operations Center" introduced
2003	Police helicopter services established
2007	The full-scale exercise concept Øvelse Tyr introduced The national crisis preparedness guidelines implemented
2008	"Shooting in progress"-procedure implemented
2010	An internal national alarm system implemented First phase of digital nationwide multi-agency communication network for the emergency agencies implemented A course aimed specifically for the Operations Commanders is held for the first time at the Police University College

There are two general observations worth mentioning regarding the timeline. First, significant reinforcements of police crisis preparedness capacity were made already in 1970s, -80s and -90s. A commonality of these measures is that they are directed at the operative level. Second, in the second half of the 2000s, some measures were made to reinforce police crisis preparedness and coordination capacities. In the following, I briefly elaborate on two significant findings: how the intermediate level has been largely neglected when it comes to competence building and the limited inter-organizational crisis coordination.

The central and neglected intermediate level

According to the crisis preparedness guidelines the intermediate level, both the Operations Center and the Crisis Command Group (CCG), are central coordinating actors in the event of a crisis. The Operations Center is also the central coordinating unit in the police district under stable conditions. Still, the intermediate level in the police districts, most notably the OC, but also the CCG, has been largely neglected. MoJ and POD gave few guidelines on how the

intermediate level was expected to be organized, staffed and composed, any competence requirements, prioritizing of tasks and so on. Consequently, these issues were to be decided by the local commissioners. With hardly any general guidelines or standards there is a risk of contrasting practices emerging in the respective police districts. As I have demonstrated, there has been significant variation on important issues such as the level of staffing in the OCs and whether to have a classification scheme for classifying incoming emergency calls in terms of importance and urgency. The empirical evidence also indicates that training and exercises involving the intermediate level have been scant, in particular training and exercises that include both the intermediate level and other hierarchical levels.

Limited inter-organizational crisis coordination

Inter-organizational crisis coordination was rarely practiced. There were few, if any, predatory crises that significantly exceeded the capacity of the police district that was affected. To be sure, there have been incidents where the police districts have requested assistance from Delta. It also happens that the police districts require assistance from adjacent police districts with, for instance, search of a suspect or search and rescue. However, these are typically instances of one-to-one coordination, e.g. between police district A and Delta or between police districts A and B. Inter-organizational crisis coordination that involves more than two parts, or where the POD has had a central role, have been rare. The same goes for incidents with a magnitude and intensity akin to 22/7. Moreover, exercises and training have primarily happened within the respective police districts and primarily at the respective hierarchical levels, e.g. training and exercises for the operative personnel, training and exercises for operators and so on. A consequence of the first and second point mentioned above is that inter-organizational practice has been scant, which means few opportunities to build collective knowledge across police districts.

4.11 Conclusion

In this chapter I have argued that the design and practice of the police crisis preparedness and coordination capacities were characterized by a decentralized silo structure. The Norwegian police have traditionally been characterized by decentralization, local commissioners with high autonomy, and a generalist orientation, i.e. not specialized in many different departments. The issue of prioritizing and making efforts to build and develop crisis coordination capacities was by and large left to the discretion of the local commissioners. The POD and MoJ gave few guidelines and set few requirements in the field of crisis preparedness. Furthermore, the air transport capacities were hard to reach and gradually reduced during the 2000s, and there were significant limitations in the information processing capacity of the police. The design of the channels for information sharing reinforced the silo structure that characterized the design and practice of crisis coordination in the police more generally.

More broadly, these limitations and the silo structure can be explained by organizational characteristics of the police (decentralized, generalist oriented, autonomous police districts, the POD struggling to find its role), and more broadly the peaceful environment (no major shocks) and the political-institutional environment the police was subordinated to and operated in (detailed and biased political steering, crisis preparedness not a priority). These conclusive remarks are corroborated by the empirical evidence in the next chapter, which examines the efforts to design and implement a national alarm system within the police.

5 Building Crisis Coordination Capacity – The New Alarm System[36]

[36] This chapter builds on the book chapter "The alarms that were sent, but never received: Attention bias in a novel setting", to be published in Bach, Tobias and Kai Wegrich (eds.), *The blind spots of public bureaucracy and the politics of non-coordination. London: Palgrave MacMillan* (Renå, 2019).

5.1 Introduction

On 22/7, between 16:43 (roughly 80 minutes after the explosion in Oslo) and 18:50, the police sent three emails via their email based national alarm system to the 27 police districts. All three emails contained information of utmost importance at the time. The first email included information about a possible getaway car. The second email reported that border control at the inner Schengen borders had been reintroduced to potentially stop accomplices from fleeing the country. In the third email it was reported that one perpetrator had been arrested at Utøya, and that the perpetrator had explained there were two more cells in Norway, which had yet to strike. Only six of the 27 police districts registered any of the three emails during the evening of 22/7 (NOU, 2012, pp. 152–153; Politidirektoratet, 2012, p. 13). Why did so few police districts register these emails?

At 20:09, the Telemark police district contacted Kripos, the police agency responsible for distributing national alarms, because the Telemark police had thus far not received any emails via the national alarm system, which the Telemark police found puzzling given the events that were unfolding (Telemark politidistrikt, 2011). To my knowledge, the Telemark police district was the only police district on 22 July 2011, to actively question why it had not received any orders or alarms from the national level.[37] The country had been subject to two terrorist attacks of unprecedented scale, the deadliest incident in Norway in the postwar era. Why did not more police districts actively question why they had not received any emails via the national alarm system? Later on in the evening, Asker and Bærum police district coincidentally became aware that Kripos had distributed emails via the national alarm system earlier in the evening, although the Asker and Bærum police had not received any (Asker og Bærum politidistrikt, 2011, pp. 33–34). The Asker and Bærum police informed Kripos

[37] Thirty minutes earlier, the Telemark police had been informed by the Nordre Buskerud police that one perpetrator had been arrested at Utøya and that there were two more active cells – and that Kripos would distribute a national alarm about this (Telemark PO-log). Thus, the active questioning by the Telemark police came after being informed such information was on its way (see also 8.1.4).

that it had not received any national alarms. Therefore, Kripos decided to send a test alarm by using a different set of email addresses, which it did at 00:51 on 23 July. Fifteen of the total 27 police districts registered the test alarm. Thus, 12 police districts had still not registered any national alarm. Why?

The aforementioned empirical puzzles form the starting point of this chapter, which examines: *Why did not the police's internal alarm system work on 22/7?*

In brief, the police's alarm system was an email-based system to be used when the respective organizational units have information that should be distributed to other organizational units without delay (Politidirektoratet, 2010b). Each police district had one freestanding personal computer (PC) with one single purpose only: to receive national alarms. The national alarms would be sent via email by Kripos, upon request from the POD or one of the police districts. I construe the system as well-functioning when emails sent via the alarm system swiftly reach all its designated recipients, and the recipients automatically notice and become aware of the email.

In this chapter I argue that the decision to opt for an email-based alarm system was shaped by the organizational roles the individuals involved had, and the political steering they were subject to. Moreover, the limitations in the chosen technical solution are only one part of the explanation. More important was a flawed implementation process, which resulted in an alarm system with latent weaknesses in its design. The alarm system exhibited weaknesses that remained largely unknown because of a lack of testing and practicing of the system, which resulted in a low awareness of the weaknesses until 22/7.

The police did not see the importance of a well-functioning alarm system because i) crisis coordination in the police was traditionally a one-to-one interaction at the local level, ii) there was no disruptive incident that put swift crisis coordination on the political agenda, and iii) the political steering of the police was characterized by detailed and biased performance management—biased towards other issues than crisis preparedness. The implementation of the alarm system failed due to a passive enactment of a novel and unclear organizational routine in a highly institutionalized setting. In the aftermath of

22/7, the alarm system was subject to more comprehensive scrutiny, and a changed political context resulted in a political request for a new and more advanced alarm system.

In the next section I describe how the need for an alarm system came about (5.2) followed by the process of finding an appropriate solution (5.3). Then I examine the implementation of the chosen solution (5.4 and 5.5). In the succeeding section I discuss the findings (5.6) before I conclude (5.7).

5.2 A need for a swift alarm system occurs

In April 2004, a NOKAS cash depot was robbed in Norway's third largest metropolitan area by a group of gunmen armed with bulletproof vests, helmets, and automatic weapons. The gunmen undertook extensive means to delay a police response, including blocking the car exit at the local police station with a burning lorry, placing smoke bombs in front of the building, and spreading spikes across the road to burst the tires of any police vehicles that exited from the local police station. When the police arrived at the NOKAS cash depot, shots were exchanged, and one police officer was shot dead. The brutality of the bank robbers was unprecedented in a Norwegian context.

In the internal evaluation report of the incident, the evaluators argued that, when larger incidents occur, the police "need a swift and secure way to alert other police districts, as well as other collaborating actors nationally and internationally" (evaluation report of NOKAS incident cited in Sønderland, 2012, p. 11). Thus, the NOKAS robbery led to the first call for a nationwide alarm system in the police. To what extent police leaders and officers shared the assessment of the evaluators is uncertain. Although the NOKAS robbery shocked the nation, it was still "only" one isolated incident.

5.3 In search of an appropriate technical solution

Three actors were central in the process of finding and selecting a technical solution for a national alarm system: the POD, the Police ICT Services (*Politiets*

IKT-tjenester, PIT), and Kripos. PIT is a national administrative agency subordinated to the POD. The primary task of the PIT is development and maintenance of the ICT (information and communications technology)-based information systems in the police, and the PIT has functioned as the technical experts for ICT-related issues. Kripos is one of five national police agencies (cf. 4.2). Kripos has international police collaboration (Europol, Interpol, et cetera), including receiving and distributing international alarms, as one of its primary tasks. The POD led the process, while the PIT and Kripos had designated tasks. Within the POD, the task of leading the process was delegated to the Crisis Management Unit (*Politiberedskap*), which was on the lowest level in the organizational hierarchy in the POD. The Crisis Management Unit was one of five administrative units subordinated within the Department of Police Operations (*Avdeling for politifag*), which was one of five departments subordinated under the police director (Statskonsult, 2004, p. 11).

The POD followed up the evaluation report from the NOKAS robbery by ordering the PIT to, in collaboration with Kripos, develop a suggestion of "how an efficient electronic alarm system can be developed *within current technological structure* in the police . . . by June 1, 2005" (Politidirektoratet, 2011a, p. 11, author's emphasis). One year overdue, the PIT submitted their suggestion of a technical solution to the POD (Sønderland, 2012, p. 42).[38] According to the assistant police director, the PIT's solution would have cost several million Norwegian kroner (POD 2) and thus conflicted with the criterion "within current technological structure", set by POD. The Crisis Management Unit in the POD informed the top management about the cost of the suggested solution and the reply was clear – the POD had no money available to invest in an alarm system (POD 2 and 5). The reason was twofold, according to the top management in the POD. The POD had, in practice, little economic leeway, due

[38] In the aftermath of 22/7, the national police commissioner set up an internal committee to evaluate the police response, called the "Sønderland-committee" after the name of the leader of the committee. This report is referred to as Sønderland 2012. In addition, the respective police districts, agencies and POD conducted their own internal evaluations of own response. When referring to these reports I use the name of the police agency, e.g. Kripos 2012.

to the general goals and conditions set by the MoJ in its annual performance contracts to the POD (cf. 4.3.4). Moreover, the finances the POD had at its own disposal had already been spent on upgrading the general ICT infrastructure (Killengren, 2012; POD 1).

It took nearly two years from when the PIT submitted its suggested solution to when the POD issued a meeting to follow up. According to a senior advisor at the PIT involved in the process, the POD did not take an active lead role in the process this time (PIT 2). The temporary pause of nearly two years is itself a clear indication that finding an appropriate solution was not a top priority in the POD. In the meeting, which was held in March 2008, the POD asked the PIT to come up with an updated alternative (NOU, 2012, p. 148). The PIT developed a new alternative by August 2009, based on the existing police operative log system (the PO-log). The POD, however, chose to develop another solution based on its Microsoft Outlook email system. Interviewees that worked in the crisis management unit in the POD at the time, imply that the solution the PIT suggested was not chosen because there were uncertainties regarding cost and regarding how safe and solid the system was, as well as constraints on its functionality (POD 5; O 5).

The solution the POD chose also had limited functionality and was not considered a safe and solid system by the experts in the PIT (see below). According to interviewees that worked in the POD at the time, the solution was chosen because the expenses were modest, and it was important to find a system that could be quickly implemented (POD 2 and 5; O 5). Thus, their reasoning gave primacy to cost- and time-efficiency, rather than functionality and quality. In contrast, the PIT emphasized technical functionality in their selection processes. The POD's referral to time-efficiency is something of a paradox considering how slow the POD was to follow-up on the suggestions from PIT.

In November 2008, the PIT coincidentally became aware that the POD had chosen the "Outlook alternative"; the decision was taken without any formal involvement of the PIT (PIT 2). The PIT then wrote a letter to the POD saying it would implement the system because it had been ordered to do so by the POD. However, the PIT also wrote that it discouraged the POD's decision because the

solution lacked redundancy, there was no guarantee that messages would reach its recipient(s) within an appropriate time, and the recipients were not forced to give the received alarm attention nor to confirm that they had received it (Sønderland, 2012, p. 42; PIT 1 and 2).

5.4 Implementing the chosen solution

Once the POD had chosen a solution, it was time for implementation. In March 2010, the POD sent out a circular (*rundskriv*) to the police districts with guidelines on how the alarm system worked (Politidirektoratet, 2010b). Circulars are mandatory; thus, the police districts are expected to follow-up any orders and instructions given in circulars.

The circular prescribed some information on what an alarm message was expected to contain but was less clear on what recipients were expected to do when receiving an alarm message. Moreover, the circular said nothing about who was responsible for the testing, controlling, and maintenance of the alarm system—and nothing about the role and responsibility of the POD. These shortfalls indicate that the POD did not have an explicit strategy on what role it would take.

In a subsequent letter sent in July the same year, the POD ordered the police districts and national special agencies, "to write a local guideline on operating the system, outlining, inter alia . . . procedures on testing the system"; furthermore, POD emphasized that all police districts were expected to have installed PCs dedicated to the alarm system by 15 September 2010 (Politidirektoratet, 2010c).

Thus, the POD addressed what tasks and roles the respective organizational entities in the police were expected to have in various settings but left a void regarding its own role and responsibilities. The POD was not an integral part of either operating or maintaining the alarm system. Kripos was given the responsibility to test the system, while the PIT dealt with technical issues. What role the POD was expected to have was less clear. According to an interviewee from Kripos, they missed an explicit, overall strategy on the alarm

system (K 1). The POD's own evaluation of 22/7 found that the employees at the POD, which the evaluators interviewed, had limited "(…) overview of the technical status of the alarm system"; they had "different views on whether the guidelines for alarm messages were sufficiently elaborate"; and they differed on whether the "POD's lack of a role and responsibilities in relation to the execution of alarms are appropriate" (Politidirektoratet, 2011a, p. 13). This leaves an impression of a disintegrated POD with no clear idea on what role it had regarding the maintenance of the alarm system and whether it would have an operative role in the case of a national alarm.

Although the POD ordered the police districts to implement the alarm system by mid-September 2010, this did not happen because the police districts were slow to follow up the orders given by the POD.

5.5 Low awareness in the police districts

Upon a robbery of a post office on 23 December 2010, the Oslo police issued a request to Kripos to send an email via the alarm system to relevant police districts. Kripos distributed an email to 18 police districts and national police agencies. In the email Kripos requested explicit confirmation from the recipients that they had received the email. Six out of the 18 police districts and agencies never confirmed. Among those who confirmed, the response time varied from five minutes to 24 hours (Kripos, 2011).

A Kripos employee informed an employee at the POD by email about the experienced weaknesses in January 2011. The Kripos employee wrote that he sent the email to this employee "because I do not know who in POD is dealing with issues related to the electronic alarm system".[39] Kripos never received any response to the email from the POD (Kripos, 2011, p. 14). This could be construed as another indication that the alarm system was not a top priority in the POD. Neither did Kripos make any efforts to follow up its own email.

Due to the experienced limitations with the alarm system, Kripos ran a test of the system on 9 June 2011. The results were far from satisfactory. Among

[39] Internal email, 6 January, 2011.

those police districts that responded,[40] the response time varied between one minute and three months. Moreover, very few responded in a way that enabled Kripos to identify on behalf of which police district they were responding. In many of the instances, several police officers responded from the same police district (Kripos, 2011, p. 14). The only back-up alternative to the email-based alarm system, that Kripos had available, was to send group messages via telefax (Sønderland, 2012, p. 45).

Some of the explanations the police districts gave, in their respective evaluations of 22/7 on why its Operation Centers did not register any of the national alarms that were sent, reinforce the impression that the alarm system, and how it worked, was not well known in the police districts. The Romerike police did not register the alarms because they had been sent to the police district "by using a system that had been phased out" (Romerike politidistrikt, 2011, p. 1). The Søndre Buskerud police wrote in its letter to the evaluators that alerting adjacent police districts was "mainly done by phone" and that the national alarm system had been "used little thus far". Furthermore, "[d]ue to data technical challenges it was coincidental whether the Operations Center registered national alarms when they were sent" (Søndre Buskerud Politidistrikt, 2011, p. 9). Moreover, as pinpointed by the Rogaland police, the police districts had limited information on how to implement and use the national alarm system. After the letter POD distributed to the police districts in June, 2010, no written information was given and "[t]here has been no training on how to use the system, and there does not exist any user manual" (Rogaland politidistrikt, 2011, p. 7).

To summarize thus far, the few documented experiences with the alarm system, after it was established in 2010, clearly indicate that the pre-existing patterns of inter-organizational crisis coordination between the police districts, i.e. one-to-one interaction between the Operation Centers (cf. chapter 4), remained largely unchanged up until 22/7. The reality was that few responded swiftly when national alarms were sent, and even fewer responded in a way that was identifiable to Kripos. The implementation of the alarm system had, thus

[40] The data material says nothing about how many police districts responded.

far, not manifested itself in a new organizational routine even though the POD already in June 2010, had ordered the police districts to set up alarm PCs.

However, POD did not follow up its written order actively. According to one of the interviewees at POD, the issue was raised orally on several occasions in the regular meetings between the leaders of the POD and the police districts in fall/winter 2010 and spring 2011 (POD 5). Raising the issue orally to the local commissioners on a few occasions was evidently not enough. For instance, another interviewee from the POD, who visited several police districts and their operation centers in this time period, said that the police districts showed little interest in this issue. Sometimes, he even found the PCs designated for the alarm system stored away in drawers and cupboards (O 5; see also Helsingeng, 2011). It appears that the POD was reluctant to challenge the existing decentralized silo structure (cf. chapter 4) in the sense that the POD was reluctant to enforce the police districts to follow-up the orders the POD had given. And, the commissioners in the police districts showed little interest in ensuring that the orders from the POD regarding the alarm system were implemented and practiced.

5.6 Agenda shifts, designed incapacities and biased attention

The NOKAS bank robbery, in 2004, triggered a call for a swift and secure way to alert police districts and other collaborating actors in the event of extraordinary incidents. There was a call, from the police evaluation of the incident, for designing a channel structure that enabled sending streams of information about extraordinary problems swiftly horizontally and vertically in the police organization. A technical solution was eventually chosen in 2009 and implemented in 2010. However, on 22/7 in 2011, the new alarm system did not work. I argue that the decision to have an email-based alarm system was reasonable, seen from the perspective of the respective actors involved, even though the chosen technical solution had significant limitations in its functionality. The technical limitations of the chosen solution are only one part

of the explanation. More importantly, the implementation of the chosen solution failed because of reluctant steering by the POD and an unwillingness to follow-up the POD's orders by the police districts. The argument is elaborated in the subsequent sections.

5.6.1 The NOKAS-robbery did not result in a "window of opportunity"

The NOKAS-robbery put the need for a system that enables swift alert across organizational boundaries on the agenda in the police. However, the issue did not result in a "window of opportunity" (Kingdon, 1984). First, the problem came onto the agenda primarily *inside* the police, not on the *political* agenda. While the police initiated an internal evaluation that subsequently called for a need for a system enabling swift alert across organizational boundaries, there were no public inquiries or external analyses initiated by the government or the parliament. Second, there was no ready solution available, thus the solution stream (in Kingdon's conceptualization) was absent. Four years passed before POD decided on a technical solution. In the meantime, no external shocks with a magnitude akin to the NOKAS incident occurred. Thus, awareness of the risks and vulnerabilities made apparent by the NOKAS incident gradually faded, and attention shifted to other issues considered more present and urgent (Baumgartner & Jones, 1993; Kingdon, 1984).

5.6.2 Choosing an email-based alarm system

I argue that the decision to have an internal alarm system based on email came as a result of decision-making shaped by the organizational roles the individuals involved had, and the political steering they were subject to. While the total cost of the system was a key concern for POD, a well-functioning system was the primary concern for the PIT. The POD leadership delegated the project management to its Crisis Management Unit, an administrative unit positioned on the lowest hierarchical level in the POD. The fact that the Crisis Management Unit was organized at the lowest hierarchical level in the POD also indicates that crisis preparedness more generally was not a top priority in the POD. To get the attention of the top leadership the Crisis Management Unit had to first get the

attention of its superior body, which was the Police Department. Then, subsequently, the Police Department would have to get the attention of the top leadership.

Moreover, the Crisis Management Unit had few employees in the early 2000s. One interviewee working in the unit at the time points to a discrepancy between the staffing – two to three employees, of a total of 120 POD employees – and a growing task portfolio (POD 5). Thus, the task to lead the alarm system project came amidst a number of other pressing tasks. This may explain the lack of active steering by the POD in the process of finding a solution and why this process took time. In the first phase, the PIT spent one year longer than the initial deadline set by the POD to suggest a technical solution. Subsequently, almost two years passed before the POD followed up, indicating that the issue was not a top priority for them. With the overall economic responsibility for the police organization, the POD was the one who would be held accountable by the MoJ if it exceeded its budget. From this perspective, the POD's focus on low costs was reasonable. The PIT, on the other hand, had maintaining and developing well-functioning ICT systems as its primary goal; thus, it was reasonable for the PIT to give primacy to functionality rather than cost-efficiency. Although the chosen system had limitations, the system proved better-functioning upon the introduction of a more comprehensive test regime after 22/7. The fact that the chosen technical solution functioned better upon 22/7 demonstrates that technical limitations of the chosen solution is an insufficient explanation of why the email-based alarm system did not work on 22/7. Another important and necessary explanatory factor is a flawed implementation of the chosen solution (discussed below).

There is also reason to believe the problem of finding an appropriate technical solution was related to a more general problem for the police: modernizing their ICT infrastructure. In 2010, two evaluations expressed harsh critiques of both the POD and PIT and their efforts to modernize the police's ICT infrastructure in the preceding years. The evaluations concluded that the POD and PIT lacked control and overview, that the governing of the projects was poor, and that the POD lacked the requisite competence on the subject matter

to function as an effective project leader (Helsingeng & Sæther, 2010). According to the director of the PIT, the steering by the POD was uncoordinated. For instance, during a single year the PIT received 80 assignments from the POD, in addition to the assignments listed in the annual performance contract. Moreover, the POD gave no signals on how to prioritize between the respective assignments (PIT 1).

5.6.3 A flawed implementation process: Designed incapacities

As the descriptive analysis in this chapter demonstrated, the implementation of the chosen technical solution was flawed. POD gave limited instructions to the police districts on how the chosen alarm system was expected to be operated in practice. For instance, the POD gave limited information on what recipients of emails via the alarm system were expected to do with the email. Moreover, during winter 2010/2011 and spring 2011 there were some indications that the alarm system did not work properly and that the police districts had low awareness of its existence. For instance, many police districts simply did not respond for weeks, or even months, when an email was sent via the alarm system.

I argue that the alarm system exhibited some weaknesses and that these weaknesses did not come to the fore because of a lack of testing and practicing of the system. I conceptualize the undetected weaknesses of the police alarm system as instances of designed incapacities. The conceptualization is inspired by Robert Merton's definition of Torstein Veblen's concept of trained incapacities: "that state of affairs in which one's abilities function as inadequacies or blind spots". The reason why one's abilities turn into inadequacies, or blind spots, is that "[a]ctions based upon training and skills which have been successfully applied in the past may result in inappropriate responses under changed conditions" (Merton, 1940, p. 562 emphasis in original).

Inspired by Merton (1940) I define designed incapacity as a state of affairs in which parts of the organizational design function as latent inadequacies. These inadequacies are latent in the sense that they are prescribed for situations and settings that the organization thus far has not experienced or practiced. The police alarm system exhibited designed incapacities, i.e. the design of the system

had latent weaknesses, and these remained latent, because the alarm system was hardly ever practiced. The difference between designed incapacities, as I conceptualize them, and trained incapacities, as Merton conceptualize them, is the role of practice. In the former, the problem is the absence of practice, i.e. the design is not practiced. In the latter, the problem is not the absence of practice, but that the actions that have been successfully applied in the past turn inadequate due to changed conditions. A commonality of trained incapacities and designed incapacities is that they can be perceived as blind spots in the organization, i.e. organizational inadequacies that the majority of the members of the organization are unaware of.

I just stated that designed incapacities are latent weaknesses that remain latent because the organization in question has not practiced or experienced situations, which the designed incapacity are meant for. In a strict sense, the alarm system does not qualify as a designed incapacity, because the police did, on two occasions to my knowledge, practice the alarm system prior to 22/7. The first instance was related to a real incident, robbery of a post office, while the second instance was a test of the alarm system (cf. 5.5.1). The problem was that the two instances did not result in a significant awareness of the designed incapacities among the leadership in the POD, Kripos or the police districts.

5.6.4 Power imbalance and the role of the environment

Why was not the alarm system in general, and its designed incapacities in particular, given more attention by the POD and the police districts?[41] The lack of follow-up by the police districts can be perceived as an illustration of the de facto power imbalance between the POD and the police districts, and how the POD exerted its role. Formally speaking, the role structure was relatively clear. The POD had the overall responsibility of the alarm system and the police districts were expected to implement any orders given by the POD.

In practice however, POD ordered the police districts to implement the alarm system, but never took any initiatives to control whether the alarm system

[41] Kripos is not included in this section because the POD had the overall responsibility at the national level for the alarm system, not Kripos.

was actually tested (Bergsaker & Melgård, 2011). Furthermore, the POD was reluctant to put pressure on the police districts to ensure that its orders were followed up. In this sense, the implementation was characterized by weak enforcement. The lack of enforcement must be seen in relation to how the POD functioned more generally. A decentralized police organization with autonomous police districts was a value institutionalized over years as part of the police's organizational structure, and that had unanimous bipartisan support (cf. 4.3). Moreover, two evaluations of the POD, conducted in 2005 and 2013 respectively, concluded that the POD struggled to find its role in the hierarchy, that it had few steering instruments, and that it was reluctant to use the ones it had (Difi, 2013; Statskonsult, 2004).

Turning to the police districts I will pinpoint four inter-related factors I argue there is reason to believe played a role. First, historically the police districts have been largely autonomous. The situation with being subordinated to a national police directorate was still quite new as the POD was established in 2001. The police districts were therefore not accustomed to being given orders from a national police directorate. Second, there is reason to believe the priorities of the police districts were influenced by the detailed steering by the Ministry of Justice that was biased towards crime prevention and maintaining transparent and efficient prosecution processes. Third, the bias towards crime prosecution can have been reinforced by the fact that local commissioners have both police and prosecutor authority within own jurisdiction (cf. 4.2). Fourth, the bias towards other issues than crisis preparedness is likely to have been reinforced by the, relatively speaking, peaceful environment Norwegian police districts operate in (cf. 4.3.2). They manage to handle most incidents within own jurisdiction on their own, or with the assistance of an adjacent police district and/or Delta. Thus, they did not experience a strong need for a new alarm system.

5.6.5 Post 22/7: Agenda shift

Due to 22/7, there was a significant shift in the public attention and agenda. All of a sudden, the alarm system in the police was subject to much attention. The external inquiry commission appointed by the government, the 22 July Commission, revealed that the perpetrator could possibly have been stopped on

his way to Utøya *if* the police had had a more well-functioning internal alarm system (NOU, 2012). Thus, the need for a well-functioning alarm system was no longer unclear.

The shift in attention made the existing alarm system subject to comprehensive scrutiny. Kripos conducted monthly tests of the alarm system, and the results were reported to the POD. Soon after, all police districts responded within a few minutes during the tests (K 1; POD 5). This demonstrates that the email-based alarm system the police had chosen could have worked better *if* the POD had been more persistent towards the police districts, *if* the police districts had been better to follow-up the orders given by the POD, and *if* the POD and Kripos had taken the initial warning signals more seriously.

In the aftermath of 22/7 crisis preparedness was the primary concern of "everyone": the media, the parliament, the government and the MoJ, and the police. Only months after 22/7, a parliamentary inquiry committee asked the minister of justice what she had done to ensure that the alarm system would work more efficiently in the event of a new terrorist attack (Politidirektøren, 2011). From being an internal issue in the police, the alarm system had now been transformed into being a politically prioritized issue. Political pressure on the issue persisted. In 2012, the minister of justice concluded that a new alarm system was needed, and a new alarm system was implemented by the POD in 2013.

5.7 Conclusion

In retrospect, the police's choice of an internal alarm system based on email seems baffling, as does the fact that it took four years to decide on what technical solution to choose. In this chapter, I have argued that the decision to have an email-based alarm system was a result of decisions that were shaped by the organizational roles the individuals involved had, and the political steering they were subject to. The POD focused primarily on cost-efficiency, which was reasonable given the role the POD had and the signals it received from its

superior, the MoJ. The PIT focused on functionality because it had maintaining and developing well-functioning ICT systems as its primary goal.

Moreover, I have argued that the reason why the alarm system did not work on 22/7 was not (solely) due to what technical solution POD had chosen. More important was the flawed implementation process characterized by an unclear role structure, where active steering was absent. The system was hardly ever tested, and the police districts did not follow up the orders that were given from the POD, while the POD was reluctant to exert more coercive power. The opportunity to enact swift alerts and communication to all police districts via an internal alarm system existed in theory, not in practice. The alarm system exhibited designed incapacities that remained largely unknown until 22/7.

The empirical evidence in this chapter corroborates and elucidates several of the assertions made in the previous chapter. For instance, the steering and coordination challenges the POD faced, situated as it was between the superior MoJ with its detailed and biased steering; and, the commissioners in the police districts historically accustomed to large autonomy and thus not automatically receptive to the steering signals from the POD. The chapter demonstrates that the police districts did not necessarily follow all instructions that were given by the POD.

Finally, the analysis illustrates the importance of examining crisis responses in their broader social, and historical, settings. What may, at first glance, seem like operative errors often have more deeply rooted causes. The police districts' failures to register the national alarms that were sent on 22/7 were not primarily a result of operative or technical error. Rather, and more fundamentally, they were a result of a flawed implementation process. If we as researchers and evaluators are unable to detect the underlying causes of crisis responses, it is just a matter of time before the detected "operative errors" will reappear (Vaughan, 2006).

EMPIRICAL ANALYSIS, part II: In-Crisis Coordination

I now turn to part II of the empirical analysis, which focuses on the actual crisis coordination by the police on 22/7. Part II comprises four chapters. The bomb explosion and the subsequent response by the Oslo police is the focus of *chapter 6*, which examines why there was a proactive mobilization of own police personnel, while there was a reactive mobilization of air transport capacities and external police capacities. I also depict the shift from normal command structure to a structure where the Crisis Command Group (CCG) is in command, and what implications it had for the crisis coordination. The chapter also forms an important backdrop for the subsequent analysis, in particular chapters 7 and 9.

In *chapter 7*, I zoom in on one particular sequence of events in the initial phase upon the bomb explosion, how the police handled and coordinated the three reports it received about an armed man in uniform observed leaving the government complex only minutes before the explosion, including the "car-tip". I trace the journey of the car-tip through the police organization in real time and analyze the actions in the broader organizational and institutional setting they happened in.

In *chapter 8* I shift analytical focus to the police districts in vicinity of the Oslo police and the national police directorate, POD. I examine what measures they enacted, if any, to mobilize police capacities upon the bomb explosion in Oslo and provide an explanation of why the mobilization differed significantly between the different actors.

In *chapter 9*, I turn to the second terrorist attack, when 22/7 changed to a sequential crisis. I examine the intra- and inter organizational crisis coordination by the three police districts that simultaneously, but independently of each other, first received reports of shooting at Utøya, as well as the efforts to mobilize the local Fire and Rescue services and its boat and two instances of self-organization.

In all chapters, the sub-chapters describing the sequence of events are done in historical present to emphasize the focus on the respective actors' situational awareness in real time.

6 “There has been a terrorist attack…”

“(…) it was basically just to start answering the calls and try to understand what on earth was going on”

Operator interviewed by author.

“It is only to push the very biggest button”

Incident Commander on the police radio at 15:37.

“Not to accuse Muslims, but could it have something to do with the cartoon book from Cappelen? #oslobomb #osloblast #osloterrorism”

Tweeted by civilian at 16:52.

6.1 Introduction

The bomb explosion in the government complex in Oslo at 15:25 on 22 July 2011, propelled the Oslo police into an intense and chaotic setting. It was evident that something extraordinary had happened, but, as one operator put it, "what on earth was going on?" (O 9). The Operations Center (OC) in the Oslo police received reports of explosions at *ten* different locations in the town center during the first fifteen minutes. Although the uncertainty persisted, it became evident relatively early that it had been one or several explosions, that it was a terrorist attack and thus a need for swift mobilization. Upon arrival at the incident scene, the Incident Commander reported back to the OC that it was only "to push the very biggest button", i.e. mobilize all capacities. While the Oslo police managed to swiftly mobilize substantial numbers of own personnel, the Oslo police concomitantly turned down offers of assistance from adjacent police districts and collaborating partners and air transport capacities were not immediately scrambled.

Why was there a proactive mobilization of own police personnel? Why was there a reactive mobilization of air transport capacities and external police capacities?

In this chapter I argue that the proactive mobilization of own personnel emerged as a consequence of context-specific characteristics, rather than pre-existing crisis coordination structures and practices. For instance, many off-duty police personnel rushed to the scene and the police stations on their own initiative, as the bomb explosion occurred only minutes after the day shift had ended.

The reactive mobilization of air transport capacities is partly explained by the gradual reduction of the air transport capacities in the years preceding 22/7 (cf. chapter 4). The police did not have any air transport capacities that were easy to reach. However, personnel in the police helicopter service called in early and reported they were available for duty (O 15). Still, hours passed before the police helicopter was scrambled. Some of the members of the Crisis Command Group (CCG) in the Oslo police believed the police helicopter had already been mobilized, while others thought it was unavailable – both conceptions were

wrong. I argue that part of the reason why these misconceptions occurred was a lack of relevant practice. In the preceding five years the Oslo police had never shifted from normal to CCG command structure without any pre-alert as it had to on 22/7. Thus, the CCG members had limited relevant experience to draw on. The Oslo CCG was under the impression that the POD would coordinate the mobilization of external police capacities, which, I argue, explains why the Oslo police did not mobilize external police capacities in the initial phase.

Moreover, I argue that the shift from normal to CCG command structure caused confusion in the Oslo OC and resulted in parallel lines of communication from the intermediate level (the OC and the CCG) to the other hierarchical levels in the Oslo police and to other police districts. This conclusion forms an important backdrop for the subsequent empirical chapters.

In the next sub-chapter, I argue that the Oslo OC had limited crisis coordination capacity when the explosion occurred and I describe the pervasive uncertainty that permeated the OC in the first 15 to 20 minutes upon the explosion (6.2). Then I describe how the surge in streams of information, personnel and problems affected the activities at the intermediate level (6.3). I round off the chapter by discussing some general findings (6.4) before I conclude (6.5). Below is a brief timeline of the activities at the intermediate level (OC and CCG) in the Oslo police from 15:25 to 17:25, which is the time span examined in this chapter.

Timeline

15:25	Bomb explodes at the government complex.
15:25–40	The OC receives reports of explosion from eyewitnesses at ten different locations in the city center.
15:29	Police unit S 20 arrives at the incident scene as first police unit and reports that there has been a bomb in the government complex.
15:37	The Incident Commander reports that there has been a terrorist attack at the government complex.
15:46	The OC receives reports of two undetonated bombs at the government complex. The area is evacuated.
15:51	The source of the reports of two undetonated bombs is detected and deemed as unspecific. The search and rescue operation resumes.

16:00	Criminal investigations post established at the main police station.
16:16	The OC receives a report of suspicious objects outside the TV2-building. A large police operation is implemented.
16:48	All functions in the Crisis Command Group (CCG) are staffed.
16:55	First CCG meeting.
17:25	Second CCG meeting.
17:26	The OC receives first report of shooting at Utøya.

6.2 Limited capacity at the Operations Center

On Friday 22 July the OC was staffed with four operators plus the Operations Commander ("4+1"), which is a low number though not unusual for a Friday evening according to several of the operators (O 7, 9, 11 and 12). An incident requiring urgent response by the Oslo police would typically occupy three operators: two operators to steer the radio communication with the operative police officers handling that incident (one operator to respond and give orders, one to monitor and log the communication in the PO-log) and one to answer related incoming calls and handle any tasks that emerge as the incident unfolds. The actual division of tasks among the operators may vary depending on the situation. But with a division as described, a "4+1" staffing would leave one operator (plus the Operations Commander) to handle and coordinate all other incidents and incoming calls from the rest of the city. Thus, an OC staffed "4+1" would have limited capacity to coordinate several simultaneous incidents or one large-scale incident. In its own evaluation of 22/7, the Oslo police describe the staffing on 22/7 as a minimum for a Friday evening (Oslo Politidistrikt, 2012a, p. 45).

The four operators on duty had limited experience with working at the OC, varying from three months to two years. One had yet to complete the planned training. The Operations Commander had twelve years of experience working as an operator and nine months as assistant Operations Commander (Oslo Politidistrikt, 2012a, p. 45). Neither the Operations Commander, nor any of the operators, had any experience working at the OC with the CCG in command (NOU, 2012, p. 84; cf. interviews with operators).

The queue of incoming emergency calls exceeded the capacity of the OC for several hours. From 15:00 to 16:00, the OC managed to respond to 54 percent of the total 185 incoming calls. In the next three hours the response rate varied between 67 to 80 percent per hour. From 19:00 onwards the OC managed to respond to more or less all calls (Oslo Politidistrikt, 2012a, p. 65).

6.3 An unprecedented setting

In this sub-chapter, I describe the unprecedented setting that emerged in the first hour upon the bomb explosion. I describe how the operators strived to make sense of what was going on amidst a surge of incoming information that was uncertain and inconsistent, and how the Operations Commander drowned in tasks, which made her incapable of making "assessments a little bit distanced from and unaffected by the intensity of the police operations" (Politidirektoratet, 2011b, p. 111) as the crisis preparedness guidelines prescribe. I also demonstrate how the efforts by the Operations Commander and the operators were significantly constrained by limitations and malfunctions in the communication technology.

6.3.1 A surge of incoming information streams: What is going on?

In the briefing[42] before they start the shift, the importance of prioritizing between the pending tasks due to the low level of staffing is emphasized by the Operations Commander (NOU, 2012, p. 84; O 9, 11, 12). At the OC they do not hear the actual explosion, but the bomb explosion automatically triggers alarms at numerous buildings directly linked to the OC via a special alarm system (Al-reg). There is a surge in emergency calls from civilians, the queue of calls exceeds the number of pending calls that can be visualized simultaneously on the computer screen of the operators. As several of the operators described it, their screens went "red" (O 9, 11, 12).[43]

[42] Each shift normally had a thirty minutes overlap. Within the thirty minutes the Operations Commander would have a briefing with the operators, before they logged themselves on to the operator desks. This was standard procedure.

[43] Incoming calls appear as a little rectangular bracket on one of the computer screens at the operator desks. The more incoming calls, the longer is the queue

The situation is unprecedented. It is "complete disorientation" in the first minutes at the OC, according to the Operations Commander, but it is evident that something extraordinary has happened (O 6). As one operator explained, it was not unusual to have six to seven incoming emergency calls simultaneously displayed on the screen, "(…) but not that the whole screen turns red (…) Then it was basically just to start answering the calls and try to understand what on earth was going on" (O 9).

During the fifteen minutes after the explosion, the OC receives reports of explosions at *ten* different locations in the town center, including the actual location of the explosion. Several of the reported locations are up to one kilometre away from the actual location, cf. figure 6.1.

of rectangular brackets appearing on the screen. The brackets are coloured and the colour indicate what type of call it is. Red is an emergency call, blue is a call from a police officer, gray is a call from a civilian calling the ordinary number and so on.

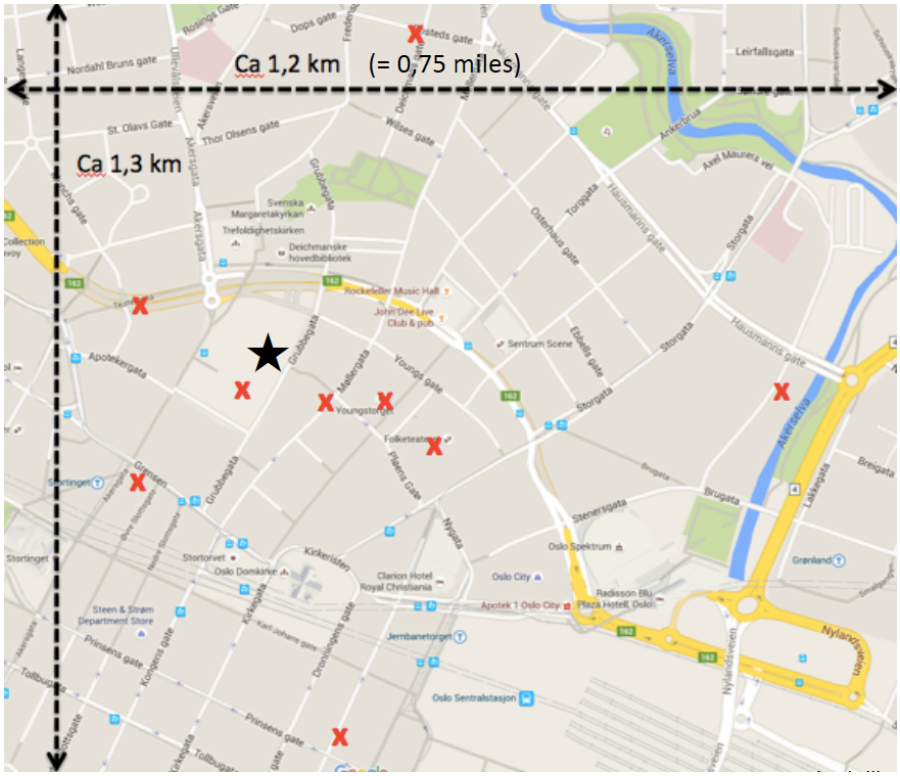

Figure 6.1: Overview of locations (red crosses) where eyewitnesses reported explosion 15:25-15:40. The black star is the actual location of the explosion.

6.3.2 A "jumping" PO-log

The most important tool for information sharing within the OC and from the OC to the rest of the police district is the PO-log. Operators typically register information in various on-going "missions" in the PO-log, for example "domestic violence" or "burglary". Under normal settings it is relatively easy for the operators to keep updated on the respective "missions" via the PO-log.

In the initial phase on 22/7 everything is registered on the same mission. New lines of registrations are frequently added. It can be described as trying to read an Excel sheet that moves an inch every time a new row is added to the

sheet.[44] The screen displays the latest 15 lines that have been registered. During the first ten minutes after the bomb explosion, 43 lines of information are added and registered in the PO-log. Thus, on average, a new line with information is registered in the PO-log every fifteenth second. The intensity of information registered in the PO-log remains high in the next ninety minutes upon the bomb explosion. On average, a new line with information is registered in the PO-log every twentieth second.[45]

One technical malfunction in the PO-log aggravates the challenge of keeping track of what is registered in the PO-log. If one operator wants to browse existing registrations to update herself on the situation, she/he has to scroll backwards to see the "older" registrations. The problem however, is that every time a new line is registered in the PO-log by one of the other operators the screen automatically "jumps" back to the present and shows the latest lines registered.

During the first hour upon the explosion, keeping track of the incoming lines registered in the PO-log is practically impossible unless you focus solely on the PO-log and do nothing else. As one of the operators described:

> There was registered so much information on 22/7 [in the PO-log] continuously, and it happened so immensely fast, that you miss information. If for example one of your colleagues writes something in the PO-log, and you are working on something else and registering your own information in the PO-log. Then, there has been added much information while you have been busy registering your own information. And this information has disappeared away from the screen while you were registering your information. It is still there of course, but then you have to scroll back up again. And (…), every time a new line was

[44] The description is made by the author based on own field observations at the Operations Center and the interviews with the operators.
[45] The number is based on a simple analysis of the PO-log conducted by the author counting the number of registered lines between 15:26 and 16:55. In the subsequent ninety minutes (16:56–18:25), a new line with information is registered on average every sixtieth second.

registered in the log you dropped down to the newest registration. So if you needed to read something further up in the PO-log, and someone else registered something, then just "boom" and the screen dropped down to the newest registration (O 9).

No one at the OC has monitoring the PO-log as her one and only task in the early stages of the crisis response. The combination of a surge in incoming information streams to the OC, the limited functionality of the PO-log and the low level of staffing makes it very hard for the operators and the Operations Commander to maintain some sort of overview of what is going on in the initial phase after the explosion.

6.3.3 There has been a bomb explosion, but how many and by whom?

At 15.30-15.32 the OC receives three independent reports of a bomb at the government complex. Two from police units and one from a security officer at the security control room in the government complex. The operators receiving these three reports decode the information they receive and register it in the PO-log as "bomb in government complex" (two registrations), and "SECURITY CONTROL ROOM – car bomb in white van that has exploded" respectively.[46] All reports stem from professionals, which gives the reports extra credibility.

From complete disorientation, the operators gradually start realizing something dramatic has happened. As one of the operators describes it:

> We received many reports from several locations in the city that there had been an explosion. Initially I thought that some kitchen had gone off, a propane container or something like that. That was my first thought. Then came the reports from Sierra 2-0 [code signal for one of the police units at the incident scene] that removed any doubt, and I realized that something had happened, there had been an explosion in the government complex (O 12).

[46] The Oslo police, PO-log, 15:30-15:32.

By 15:37 the Incident Commander has located the center of the bomb explosion. His feeling is that there has been an attack on Norway (Mortvedt, 2013a). He reports via the police radio back to the OC: "Mobilize CCG-functions. It seems two bombs have detonated here. One in the main block, and one in the… [difficult to read]. There are many wounded and many dead so it is only to push the very biggest button (…).[47] What is registered in the PO-log by the operator are descriptions of the damage to buildings and civilians, the location of the bomb, that Delta should be mobilized, armament authorized and that he believes there have been two bomb explosions.[48]

Simultaneously as the operators at the OC gradually start realizing that there has been one or several explosions at the government complex, they receive reports of explosions elsewhere in the town center, cf. figure 6.1. One of these reports is an actual explosion.[49] However, the explosion is of small scale and turns out to be an accident related to construction work. Furthermore, at 15:45, the OC receives a call from a police officer at the incident scene reporting that he has talked to an eyewitness who claimed there are three bombs.[50] One minute later, it is reported via the police radio that there are two undetonated bombs at the incident scene in the government complex. The Incident Commander decides to evacuate the area. After five minutes, the source of this information is detected. It turns out the report is not based on concrete observations and is therefore assessed as an unlikely assumption. The Incident Commander therefore orders the first responders to resume their operations at the incident scene.[51]

To summarize thus far, although the uncertainty on the number of explosions and what or who caused them is still pervasive, it is evident for those in command at the OC and at the incident scene that there has been a terrorist attack and that there is a need to mobilize police capacities. At the same time,

[47] The Oslo police, transcript radio, TG-1 15:37:54-15:39:43.
[48] The Oslo police, PO-log, 15:38-15:39.
[49] The Oslo police, transcript of phone call, 15:37:25-15:40:06.
[50] The Oslo police, transcript of phone call, 15:45:31-15:47:37.
[51] Written report by Incident Commander ; the Oslo police, transcript radio.

the operators struggle to handle the surge in the streams of incoming information and concomitantly mobilize and coordinate the police capacities.

6.3.4 Operations Commander drowning in tasks

At the time of 22/7 it was standard procedure that alerting and mobilizing key personnel was a central part of the task portfolio of the Operations Commander. The communication systems at the Oslo police did not enable swift mobilization of own personnel, because it lacked systems for automatic mass mobilizations, for instance a unified message system that reached all police personnel. There was one exception, a system for automatic alert of the CCG-members (CIM) existed. However, the CIM-system was on the same computer screen as the internal system for national alarm and the al-reg system. To be able to use the CIM-system the Operations Commander would have to temporarily "close" the two other alarm systems. The Operations Commander wanted to avoid this to reduce the risk of "missing" important alarms and therefore decided not to use the CIM-system (Oslo Politidistrikt, 2012a, p. 48). Furthermore, the national alarm system was email-based, had hardly been tested and was de facto a "blind spot" until "22/7" (cf. previous chapter).

During the first thirty minutes after the explosion, the Operations Commander alerted the Commissioner and the station chiefs at the local police stations in the police district, and ordered them to mobilize local capacities. She mobilizes Delta (the national anti-terror police), and the members of the CCG. Because of the technical limitations, the Operations Commander executes all alerts and mobilizing measures manually by telephone. Every call has to be done twice to get a signal due to a technical error (Oslo Politidistrikt, 2012a, p. 48). The combination of technical limitations and the procedure prescribing that the Operations Commander mobilize relevant capacities makes the Operations Commander preoccupied with alerting key personnel in the initial phase, and she feels more like an operator than an operations commander during the first hour of the crisis response (O 6). So does the assistant operations commander supposed to assist the Operations Commander in alerting and mobilizing relevant functions and capacities. She manages to alert a couple of functions, but that is all, because "there was no time to do anything else but answer the phone"

(O 9). As described in chapter 4, one of the CCG-functions, the CCG 1 (personnel), is designated to be in charge of alerting, mobilizing and allocation of personnel. CCG 1 can in other words relieve some of the workload of the Operations Commander regarding mobilization. However, eighty minutes pass from the bomb explosion until the CCG 1 function is staffed (Oslo Politidistrikt, 2012a, p. 62).

The combination of a procedure stating that alerting and mobilizing key personnel is to be done by the Operations Commander and an infrastructure that primarily enables alerts manually by telephone to one at a time resulted in an OC with a weak command structure in the initial phase. This is in stark contrast to the crisis preparedness guidelines that prescribes that "One intention of the role and function of the Operations Commander is that she/he can assess the situation from a distance, unaffected by the intensity of the police operations" (Politidirektoratet, 2011b, p. 111).

6.3.5 Reinforcing the OC

Within the first hour the ten operator desks at the OC are staffed, including two more operations commanders (Oslo Politidistrikt, 2012a, p. 47). However, the incoming operators are not briefed on the on-going situation by anyone on arrival, and there is no time to browse the PO-log to try and get some sort of an overview. As one operations commander describes: "Upon entering the Operations Center there was no information like 'What is the situation now?' 'What has happened?' 'What are we working on?' (…) Browsing the PO-log was not an option, there was no time for that" (O 7).

6.4 Gradual shift in the command structure

In this sub-chapter I describe the shift from normal command structure to a CCG command structure. I describe how the shift developed gradually and argue that the shift resulted in several coordination challenges both between the OC and the CCG, but also between the intermediate level and other hierarchical levels in the Oslo police as well as other police districts.

6.4.1 Establishing the CCG

Some of the CCG-members are already present at the police station when the bomb explodes and are thus swiftly mobilized. The person holding the CCG 3 function (responsible for coordinating the police operation) is on holiday and his substitute is among the most experienced Incident Commanders in the district and has the role as Incident Commander. The person that ends up taking the role as CCG 3 in the initial phase of 22/7 has extensive experience with incident commandment, but no experience from working in the CCG and is unaware there exists an "action-card"[52] (*tiltakskort*) for the CCG 3 function (NOU, 2012, p. 95).

Around 16:00, CCG 2 (responsible for intelligence and criminal investigation) establishes the criminal investigations post at the main police station Oslo, and subsequently an intelligence post (Oslo Politidistrikt, 2012a, p. 55). By 16:48 all CCG-functions in the Oslo police are staffed with either a permanent member, or its formal, or an *ad hoc,* substitute (Oslo Politidistrikt, 2012a, p. 48). The shift from normal command structure to crisis command structure happens gradually (NOU, 2012, p. 93), and is not made clear and explicit to everyone as the crisis preparedness guidelines prescribe (Politidirektoratet, 2011b).

6.4.2 The police operation at TV2

At 16:16 the police receive reports of observations of suspicious objects outside the office building of TV2, a national broadcasting corporation. The first police unit to arrive at the location three minutes later reports to the OC that the suspicious objects are a "garbage bag and a – yes, a backpack that may appear to have been left by a homeless [person], but we have not checked it".[53] According to the evaluation by the Oslo police, this information gets lost from the operators and important details are not forwarded to the Incident Commander (Oslo Politidistrikt, 2012a, pp. 57–58). Instead, it is decided to evacuate the

[52] An "action-card" is a piece of paper listing what actions, priorities and responsibilities are affiliated with the function. It can also give guidance on what activities and measures that should be considered in different types of scenarios.
[53] The Oslo police, transcript radio TG1, 16.19:59-16.20:55.

building and examine the objects. This part of the police operation requires substantial personnel and attention, more than four hours passes before it is concluded that the objects are harmless and that the area can be reopened.

The first CCG-meeting is held at 16:55, ninety minutes after the explosion. A primary focus at the first meeting is the situation at the TV2 building.[54] In the minutes of the CCG-meeting there is no mention of the reports about an armed man in uniform observed at the incident scene and his car, which the OC received only minutes after the explosion (elaborated in chapter 7). This information is not an issue at the second CCG meeting that starts at 17:25 either (ibid).

The police operation at TV2 is an example of how the non-coupling of one information stream (harmless objects) to relevant police personnel (the operators and the Incident Commander) had big impact on the subsequent coordination of the police capacities on 22/7, because the police operation at TV2 required significant police capacities as well as attention from those in command at the intermediate level.

6.4.3 "Flagging" and decoupling in the PO-log

In order to have access to the same "mission" in the PO-log as the OC operate in, the CCG has to log on to the PO-log in a specific way. This is not done on 22/7 (O 7, 9, 12). The consequence is that the CCG-members cannot observe any registrations in the PO-log that are "flagged" by the operators for follow-up by one of the CCG functions. More specifically, if an operator regards the information he/she registers in the PO-log to be of relevance for one (or more) of the CCG-functions, there is a "flag"-function the operator can tick off. The CCG-members can then, if logged on to the PO-log correctly, see if there are any lines of registrations that are flagged to their function, e.g. to CCG 2, CCG 3 and so on. It is important to pinpoint that a correct login to the PO-log by the CCG-

[54] The following is registered in the minute from the first CCG-meeting: "Focus on bomb by the TV2-building. Securing the area with own police personnel" (The Oslo police, *Stabens hovedlogg*, 16:57). This is corroborated by the Operations Commander's statement to the 22 July commission, asserting that the main focus on the first meeting was the situation at the TV2 building and the upcoming press conference (NOU, 2012, p. 96).

members is only a necessary condition to become aware of any "flagged" registrations. Thus, they would not have received an automatic alert of some kind. Instead, they would have had to actively search for flagged registration in the PO-log. Given the intensity of the setting and the mixed experience with the PO-log among the CCG-members, it is not certain that the CCG-members would have noticed any flagged registrations even if they had logged on correctly.

Many of the operators, even the more experienced ones, are also unaware of the "flagging"-function in the PO-log (O 7, 11, 12), which itself is an indication of the operators' inexperience working with the CCG. The problem with the PO-log related to CCG is evident in an exchange between two experienced Operations Commanders (one of them is off duty): "Yes, it is pretty chaotic here, (…) of all things – and this is embarrassing – the CCG have still not started using the PO-log".[55] This is said at 17:26, thirty minutes after the CCG start their first CCG-meeting.

6.4.4 Uncertainty in the OC on who is doing what?

At the OC there is uncertainty concerning the command structure and what functions have been established and not. One example to illustrate, at 17:18, more than an hour after CCG 2 has established the criminal investigations post at the Oslo police's main police station (where the OC also is located), a criminal investigator calls the OC to offer assistance: "Do you have anyone that has the main responsibility for the investigations?" The operator responds: "No, but – long log without control!"[56]. The criminal investigator continues and informs the operator that they are four criminal investigators that are ready to assist when necessary. The operator responds: "(…) four persons to Criminal Investigations. Yes, I will forward it when the time comes. We may establish a criminal investigations post". [57] The operator is thus unaware of the criminal investigations post that was established in the same building more than an hour earlier.

[55] The Oslo police, transcript phone call, 17.26:36-17.29:14.
[56] There is reason to believe the utterance refers to the fact that the screen keeps "jumping" back every time a new line is registered in the PO-log.
[57] The Oslo police, transcript phone call, 17.18:10-17.20:00.

More generally, all the operators I interviewed said they experienced the establishment of the CCG as an additional burden. Some emphasized that the CCG was an asset later on in the police operation, but not in the initial phase. The shift in command structure from normal to CCG structure created uncertainty for the operators on their own role and what they could and could not do. As one of the operators explained:

> When CCG is not established you know what to do and you know what your responsibility is, you just do it. But when the CCG enters the scene, you sort of have to: "Is this okay?" "Can we do this and that?" So you have to go via the CCG to make decisions, which takes time, so it is much easier to work without the CCG. Then you just do what you usually do, what is routine. You make things happen (O 9).

As shown, the incoming stream of personnel to the OC gets no information on the situation, and the shift from normal command structure to crisis command structure is experienced as unclear in the OC.

6.4.5 Handwritten notes and parallel lines of information sharing

Much of the information sharing between the operators and the CCG goes via handwritten notes the operators bring to the relevant CCG-member. As one of the operators describe it:

> I remember that we throughout the weekend [22/7 was on a Friday afternoon] went out of the room [the Operations Center] and to the CCG and handed them notes if we had messages or information to them, or we told it to them and they took notes. That was how it worked (O 12).

Another operator explained that when there was something the operator needed urgent response to "I had to physically go to the CCG-member I needed contact with, and then either point in the PO-log and say 'read it' and give a response, or give them a handwritten note with the message" (O 9). The one who had the

command at the strategic level also recall there was "(…) much written messages and 'tip-notes'" (O 2).

In practice, the establishment of the CCG also results in parallel information channels operating on the intermediate level. For example, CCG 3 (police operations) and the Incident Commander communicate with each other on multiple occasions via cell phones. This is done because of the intense traffic on the police radio (O 8). One consequence is that the Operations Commander is decoupled from much of the actual coordination between the intermediate and operative level. Here it must be noted that the Operations Commander was preoccupied with mobilizing capacities and other operational tasks in the initial phase (cf. 6.3.4). She would have thus presumably been hard to reach even if there was less traffic on the police radio.

More generally, the OC receives information from the incoming emergency calls and the radio communication with the operative personnel, while the CCG-members have their own information sources. This resulted in multiple lines of information sharing and communication between the intermediate level and the other hierarchical levels. As one operator described it:

> In the Oslo police we are not used to working with a CCG. The CCG communicated with their people, they received situation reports from Delta and so on and [these reports] we perhaps did not get. [Interviewer: So it became in a way two parallel lines?] Yes. Also, [the parallel lines] did not contain the same information (O 7).

In sum, a consequence of the limited practical experience with shifting to crisis command structure, both among operators and the CCG-members, is that the information sharing between the OC and the CCG are characterized by loose information-couplings. Moreover, the shift from normal to CCG command structure results in multiple streams of information from and to the intermediate level. This increases the risk of mismatch in the information sharing, information that should be directed to the CCG is directed to the OC or vice versa.

6.5 Mobilizing police capacities

Thus far, I have described the actions and coordination by those at the intermediate level in the two hours after the bomb explosion in a close to chronological outline. Now I turn to the issue of mobilization more specifically. First, I describe the efforts taken to mobilize police personnel (6.5.1), then the police helicopter (6.5.2), and finally aerial support from the Armed Forces (6.5.3).

6.5.1 Police personnel

The issue of mobilizing more police capacities was discussed on the first CCG-meeting at 16:55. The minutes of the meeting state that "The CCG 3 function [police operations] is working on establishing security at central objects (…) This in case of a new attack". Furthermore, "The CCG 1 [Personnel] and CCG 4 functions [Logistics] are mobilizing maximum. (…) Contact with POD established via liaison. There will be a need for assistance from many police districts to provide personnel to guard and protect relevant areas. Is to be implemented by POD".[58] In other words, in fear of another attack the CCG mobilizes internal capacities, while the mobilizing of other police districts is expected to be handled by the POD.[59]

In the absence of an electronic system for mass-mobilization, mobilizing operative personnel happens primarily via phone calls (cf. 6.2.5). Still, the Oslo police is able to swiftly mobilize a large number of operative police personnel. There are three main reasons. First, the bomb explosion occurred just after the end of the day shift. The commissioner orders the day shift to remain put, which swiftly increases the number of available police personnel. Second, the National Police Immigration Service (NPIS) has many police officers authorized for operative police work in their office building in Oslo who are ready to assist. NPIS tries unsuccessfully to get in contact with anyone at the strategic or intermediate level in the Oslo police. However, NPIS establish contact with the Incident Commander who responds that there is a great need for operative

[58] The Oslo police, *Stabens hovedlogg*, 16:58.
[59] The POD's role is examined and discussed in chapter 8.

personnel. NPIS dispatches all available operative police personnel to assist in the government complex (Politiets Utlendingsenhet, 2011; NPIS 1). Third, many off duty police officers come in on their own initiative. At the time of the explosion, there were approximately 100 operative police officers on duty in the Oslo police. One and a half hour later, the number is almost doubled, and by 21:00 around 300 operative police personnel from the Oslo police have been mobilized, and it remains around this level until midnight (NOU, 2012, pp. 105–106).

Those at the intermediate level who are coordinating the mobilization lack information systems that provide an overview of what personnel are present and where they are located. This makes it challenging to get an overview of their capacities and to get an understanding of what type of capacities are needed. To illustrate, at 18:07 an officer from the Norwegian Civil Defence[60] calls the OC and asks if their assistance (in terms of personnel) is needed. The Operations Commander[61] responding reply that they are not needed for the moment, "We have a lot to do, but we will get back to it, so we will not say that we turn down your offer, *but we just got to breathe first*" (author's emphasis).[62] In other words, the Oslo police may need assistance but it is too early for the Operations Commander to say, they have to get their heads above the water first to get some sense of overview. The lack of overview of own personnel remains a challenge for those in command at the intermediate level for many hours. At 22:16, almost seven hours after the explosion, the CCG 1 (personnel) function reports at a CCG-meeting "Still working on who is at the different locations, and who is available. Unknown which capacities, and in what numbers, are needed at the different objects".[63]

[60] The Norwegian Civil Defence is the State's reinforcement for the emergency and rescue departments in the event of major accidents and special incidents.
[61] By this time there are three Operations Commanders present at the OC.
[62] The Oslo police, phone call transcript 18:07:16–18:07:58.
[63] The Oslo police, *Stabens hovedlogg*, 22:16.

6.5.2 Police helicopter

While the CCG are focused on mobilizing more police personnel, there is scant attention to mobilizing air transport capacities. For the second year, the police helicopter service is not operative in the summer holidays. This was a cost-reducing measure taken by the commissioner in the Oslo police, known and accepted by POD and MoJ (cf. chapter 4).

The leader of the police helicopter service is on holiday in Turkey. At 16:00 he receives a text message from one of his pilots watching the television news coverage from the government complex. The pilot reports about the incident and that he is at home and ready if needed. The leader replies that he has thus far not received any mobilization order (NOU, 2012, p. 295). At 18:08 the leader of the police helicopter service calls the Oslo OC and asks whether they should mobilize. He is told that it is not needed, because the Oslo police has mobilized helicopters from the Armed Forces (see below).[64] Then, at 19:09, the police helicopter is ordered to mobilize. The order comes from a police leader who is not in command of one of the CCG-functions. When he enters the CCG he realizes that the police helicopter has not been scrambled yet and then takes action (O 15).

Several of the members of the CCG, including the CCG Commander and the CCG 3, are under the impression that the police helicopter has already been mobilized, (O 4 and 8). At the first CCG-meeting the CCG Commander had ordered mobilization of all available capacities. His understanding is that it includes the police helicopter even though it is not operative at the time. However, the CCG Commander never explicitly asks for the police helicopter to be mobilized (O 4). In the time span 16:30–17:20, Delta asks the CCG on two occasions whether it can use the police helicopter service. The answer Delta gets is that it is unavailable (NOU, 2012, p. 295). Delta does however not ask why it is unavailable. As Delta's liaison in the CCG explains: "It was not anything unusual that [the police helicopter service] was down for shorter periods due to

[64] The Oslo police, PO-log 18:08:01–18:09:15.

maintenance and so on.[65] So when I get that answer from a colleague [that the police helicopter service is unavailable] I accept it. (…) I did not ask (…) for the reason why it was down. It was more like police helicopter assistance was (…) one of several checkpoints on the checklist" (D 1).

At 21:06 the police helicopter is in the air and is directed to Oslo for multiple observation missions. At 22:26 the police helicopter is ordered to assist with thermal search at Utøya (NOU, 2012, p. 295).

6.5.3 Aerial support from the Armed forces[66]

At 16:50 Delta contact the 720-squadron at Rygge and asks what aerial capacities they can provide at what time. The response was that the 720-squadron currently had no helicopters operative and ready for take-off and the pilot crew had to be scrambled (Oslo Politidistrikt, 2012a, p. 75). The Armed Forces had already started mobilizing own personnel and three Bell-helicopters in case the police were to request transport assistance (NOU, 2012, p. 242).[67] The potential support from aerial capacities in the Armed Forces is returned to in chapter 9 on the police operation Utøya.

6.6 Discussion

I have examined how information, regarding what had happened, who was doing what and what capacities to mobilize, was shared at the intermediate level in the Oslo police, and between the intermediate level and the operative level. Time-wise the primary focus has been on the first two hours after the bomb exploded. In the following I discuss how pre-existing structures and practices, changes in

[65] The claim is corroborated by a report from 2013 on the police helicopter capacity. The report found that the number of missions had varied in recent years "inter alia due to the availability of the police helicopters" (Metier, 2013, p. 16).
[66] My analysis of the aerial support from the Armed Forces is here confined to the aerial capacities that were asked for and mobilized to be available for transporting police personnel if needed.
[67] According to the 22 July Commission, it started "about an hour after the explosion" (NOU, 2012, p. 242). In a book on 22/7 by investigative journalist Kjetil Stormark, the same time is used, but in a footnote Stormark also refers to well-informed sources in the Armed Forces that claim the mobilization started at 16:10 (Stormark, 2012, p. 104)

the command structure at the intermediate level, the (limited) functionality of the communication technology and characteristics of this specific crisis setting affected the information sharing and the mobilization of police capacities by the Oslo police.

6.6.1 Reluctance to order full-scale mobilization?

On several occasions during the first hours after the bomb explosion, adjacent police districts and other first responder organizations like the Norwegian Civil Defence, called to the OC in the Oslo police and offered their assistance. Most offers were turned down and the Oslo police sent no requests for assistance from the adjacent police districts during the evening of 22/7. Why did the Oslo police temporarily turn down the offers of assistance, and why were no requests for assistance sent to adjacent police districts during the afternoon and evening of 22/7? Were the Oslo police, and the police in general, reluctant to order full-scale mobilization? Possible answers to these questions are interdependent on inter-organizational factors between the local and national level, which is examined in the next two chapters, and further discussed in the overall analysis in chapter 10. For now, I will briefly mention four factors of relevance regarding the intermediate level in the Oslo police.

First, around 17:00, during the first CCG-meeting, it was decided that the mobilizing of assistance from other police districts would be implemented and coordinated by the POD, not the Oslo police. Therefore, requesting assistance from other police districts was no longer the responsibility of the Oslo police – that seems at least to have been the understanding in the CCG at the time. At the same time, it is the Oslo police, not the POD, who are best situated to assess what type of capacities the Oslo police will need.

Second, due to limitations in the communication technology, it was very difficult for those in command in the Oslo police to establish and maintain an accurate overview of available police personnel and their current positions. This delayed the process of getting an overview of the situation, including the status of own capacities. Another consequence was that those who presupposedly were expected to be proactive and coordinate for the next steps (the Operations Commander and the CCG) were instead preoccupied with operational duties.

Third, while the offers of assistance were primarily directed to the OC in the Oslo police, it was the CCG (once it was established) that had the command at the intermediate level. It was therefore difficult, if not impossible, for the operators and the Operations Commanders in the OC to give immediate and definite answers to police districts and other first responder organizations who called to offer their assistance.

Fourth, there was a substantial lack of relevant practices to draw on. The operators on duty when the bomb exploded had limited experience varying from three months to two years. Furthermore, in the five years preceding 22/7, the Oslo police had never shifted from normal to CCG command structure in response to an unexpected incident (cf. chapter 4). And, more generally, handling a crisis of this magnitude was unprecedented for everyone involved. Moreover, inter-organizational coordination, between the national and the local level and between the police districts, during a crisis was something the Norwegian police was inexperienced with.

6.6.2 Taking a streams approach

In the following, I discuss how to understand and explain the initial response by the Oslo police upon the bomb explosion by utilizing the multiple streams framework I developed in chapter 2. In brief, the crisis coordination by the Oslo police in the initial phase was significantly hampered by weaknesses in the pre-existing crisis coordination structures and practices. The negative impact of these weaknesses was to some extent mitigated by emergent self-organization. Moreover, it is important to be attentive to the multidimensional role of time to understand the dynamics of the initial crisis coordination by the Oslo police.

Pre-crisis coordination: Accepted reduction in police capacities

On 22/7 the staffing at the Oslo OC was relatively low, and the police did not have air transport capacities that would be operative and reachable within a given response-time. Neither of these factors was unique for 22/7. Low staffing at the OCs in periods of the week was common in several police districts in the years prior to 22/7, while the air transport capacity had been gradually reduced over

several years. The examples illustrate the importance of making the pre-crisis coordination an integral part of studies of (in-)crisis coordination.

The aforementioned reductions in crisis coordination capacity were decisions taken by the leadership in the police districts, the POD and the Armed Forces with the implicit or explicit acceptance by their superior ministerial bodies (cf. chapter 4). The example of air transport capacity epitomizes a point I made in 3.2.4; building reachable crisis coordination capacities is ultimately a question of prioritization and financing to be made by the leadership in the respective first responder organizations, which again may be conditioned by signals and priorities made by their superior governmental bodies.

The CCG: Effective on paper, not in practice

The crisis preparedness guidelines prescribe how to reinforce the capacity of the intermediate level in the event of extraordinary incidents. Simply put, the solution is to establish the CCG, which takes over the command at the intermediate level to relieve the workload of the OC and concomitantly increase the (coordination) capacity at the intermediate level.

The Oslo police rarely enacted the CCG structure, and it was rarely exercised in the years preceding 22/7. Moreover, none of the operators had any experience with operating under a CCG command structure. They lacked pre-existing practices on establishing the CCG structure in response to unexpected incidents. This resulted in an unclear division of work and precarious information sharing (discussed below) between the OC and the CCG.

The case of the Oslo CCG illustrates some of the limitations in the design perspective on coordination. The design perspective assumes that organizational structures such as rules of command and guidelines induce predictability and common understanding within the organization on who does what, when and how. However, as this chapter has elucidated, when the rules of command and the organizational procedures are not regularly practiced they will not manifest themselves as normative structures. Hence, although the descriptions of the CCG in the crisis preparedness guidelines may have sounded effective on paper, the transition from normal command structure to CCG command structure was not effective in practice. As for the theoretical perspectives, the case of the Oslo

CCG illustrates the interdependence between the design and the evolutionary practice perspectives.

Emergent self-organization

Many off-duty police officers came to their respective work places or called in on own initiative to join the on-going operations. Some heard the explosion, while others were alerted by colleagues, friends, relatives, or via the television coverage of the incident. This self-organization mitigated the negative impact of the fact that the Oslo police lacked an electronic system for mass-mobilization of its personnel. These instances of self-organization can be perceived as professionals instinctively responding to their "duty to act" (cf. 4.5.3) in the case of emergency.

One unintended effect of the self-organization was that those in command at the intermediate level did not have an updated overview of the self-organized personnel and their location due to limitations in the communication technology. This illustrates that self-organization can be dependent on other factors in order to be fully effective.

Information-couplings, timing and directive actions

An important tenet of the multiple streams framework is that in order to take directive action to handle a problem you first need to receive information about the problem. Therefore, examining when the different streams of personnel are coupled with streams of information is important to understand the dynamics of the crisis coordination.

That information sharing is a challenge during crisis responses is nothing new, it is rather the norm (Bharosa et al., 2010; Quarantelli, 1988). Still, I assert that two factors intensified the challenge of information sharing for the Oslo police; first, the limited experience among the operators on duty when the bomb exploded and the more general inexperience with enacting a swift shift from normal to CCG command structure (discussed above); second, the limitations in the communication technology combined with how the division of work at the OC was organized in practice. The limitations of the PO-log (e.g. "jumping" screen, no search function) made it difficult for the operators to review earlier

registrations in the PO-log, and no one in the OC had a primary focus on monitoring the information being registered in the PO-log. And the Operations Commander was preoccupied with mobilizing police capacities instead of coordinating the police operation.

A final point is that the timing of information-couplings is important to understand and explain why the first CCG-meeting focused on the TV2-building, while the "car-tip" was not an issue. When the CCG had its first meeting, one of the key issues was the on-going police operation due to reports of suspicious objects at the TV2 building, which turned out to be a false alarm. In contrast, the "car-tip" was not on the meeting agenda even though the car-tip by then had been forwarded to the rest of the police via the national alarm system. The car-tip turned out to be reports about the terrorist and his getaway-car. Both cases, the TV2-case and the car-tip, are examples of information streams that passed through the Operations Center without being coupled with the relevant police personnel. The police handling of the car-tip is examined in detail in the next chapter.

6.7 Conclusion

In this chapter I have argued that the proactive mobilizing of own police personnel by the Oslo police was a result of self-organization and the fact that the incident happened just after the day shift had ended. Thus, the proactive mobilization of own police personnel emerged as a consequence of context-specific characteristics, rather than pre-existing crisis coordination structures and practices.

Turning to the reactive mobilizing of air transport capacities I have argued that the police de facto had no reachable air transport capacities on 22/7. Moreover, building on chapter 4, I argue that the lack of available air transport capacities was not unique for 22/7, but was a situation that had developed gradually in the years that preceded 22/7. And, the superior ministerial bodies had accepted this development. In this sense, the reactive mobilizing of air transport capacities is explained by pre-existing structures. However, the

empirical evidence suggests that a lack of relevant practices also played a role. The police helicopter service could in fact have been mobilized earlier but was not, due to misconceptions among the CCG members of what measures had already been implemented. The Oslo police had very limited experience with shifting from normal to CCG command structure in response to unexpected incidents, and thus limited opportunities to develop and maintain routines on who does what among the CCG members in the initial phase of the crisis, such as for instance mobilizing the police helicopter.

Turning to the reactive mobilizing of external police capacities, the empirical evidence indicates that the Oslo CCG was under the impression that the POD would coordinate the mobilization of external police capacities. It should also be added that the combination of the magnitude of the crisis incident, the limitations in the communication technology and limited relevant experiences to draw on, made it hard for the Oslo OC and CCG to establish a relatively accurate and shared situational awareness of what police capacities they had available and where they were located.

7 The Coordination of Information

"A man in a security uniform"

Security personnel to the Oslo police at 15:31

"A specific tip about a car"

Eyewitness A[68] to the Oslo police at 15:34

"A man coming from there, wearing a police uniform or something"

Eyewitness B to the Oslo police at 16:03

[68] The labelling of the eyewitnesses as 'A' and 'B' respectively is done solely to indicate that the quotes stem from two different individuals.

7.1 Introduction

This chapter is about the coordination of information about an armed man in uniform with a car. Within ten minutes after the bomb explosion, the Operations Center (OC) in the Oslo police received two independent eyewitness reports of a man in uniform, armed with a pistol, observed in proximity of the government complex right before the bomb explosion. One of the reports even included the registration number on the license plate of his car (hereafter called the car-tip). This information was registered on a note and put on a desk in the OC where it was left unnoticed for almost twenty minutes. The note was then discovered by one of the operators, who immediately called back the eyewitness. The eyewitness reiterated the information he had given earlier. In the subsequent 15 minutes the Oslo OC communicated with four police districts and the national police agency Kripos. Three of the police districts and Kripos received information about the car-tip, but important details got lost or transformed in the encoding-decoding processes. Only two out of the five aforementioned actors implemented immediate measures to try and detect the car, while the Oslo police at this point had not implemented any measures.

Why did important details get lost (or transformed) as the information was shared throughout the police organization? Why did the Oslo police not implement any measures to try and detect the car? More generally, why did the police not respond more proactively on the detailed descriptions they received about an armed man in uniform and the car he was driving observed leaving the government complex only minutes before the bomb explosion?

In retrospect, the police coordination of the car-tip may appear as nothing but a complete failure. We know the information that the Oslo police received was in fact information about the perpetrator and his getaway car. Moreover, we know that he did not simply flee the incident scene, but drove to Utøya to start his second terrorist attack. Also, as documented by the 22 July Commission, there were several police cars that were very close to the route of the terrorist (NOU, 2012, p. 103). Thus, if the car-tip had been forwarded swiftly to the appropriate police units, the terrorist could potentially have been stopped on his

way to Utøya. This forms an important and dramatic backdrop for the scope of analysis in this chapter.

By examining the police coordination of the car tip and the two other reported observations of an armed man in uniform in real time, however, I provide a more complex and nuanced analysis of why the police coordinated the car-tip as they did. I argue that it was a result of a combination of limited pre-existing coordination practices to draw on, the silo structure of the police districts and the limited functionality of the communication technology. More specifically, I argue that information got lost because of the limited functionality in the channels for information sharing. The only viable option was sharing information orally, which makes the information sharing precarious as the information only has an ephemeral existence.

As for the lack of proactive action in response to the information the respective actors were coupled with, the inaction by the Oslo police was a result of three factors: i) the OC lacked commandment, ii) lack of coordination between the OC and the Crisis Command Group (CCG), and, iii) the timing of when the Incident Commander was coupled with the information about the car-tip. The other police districts and Kripos responded reactively because the information they received was ambiguous and not made actionable, and because they had limited relevant experiences to draw on.

In the next sub-chapter I examine how the Oslo police handled the three reported observations of a man in uniform and his car focusing on how the incoming calls were decoded and registered, and subsequently how they were shared internally by the Oslo police (7.2). Then I shift analytical focus from the intra-organizational coordination to the inter-organizational coordination, I examine how the car-tip was forwarded from the Oslo police to Kripos and other police districts. Both sub-chapters end with a summarizing discussion (7.3). In 7.4 I conclude and answer the research questions.

Below is a brief timeline of the sequence of events covered in this chapter. All operators[69] mentioned in the timeline worked in the Oslo police.

[69] The names of the operators are fictional.

Timeline

15:25	Bomb explodes at the government complex.
15:31	Operator Fiona receives information from the security central at the government complex about a man in a security uniform leaving the incident scene minutes before the explosion. Registered in the PO-log.
15:35	Switchboard assistant receives information from an eyewitness about an armed man in uniform leaving the incident scene in a van just before the explosion. Registered on a handwritten note that the switchboard assistant brings to the OC.
15:56	Operator Mary comes across the handwritten note and calls back to the eyewitness. Registered in the PO-log.
16:03	Operator Jon receives information from an eyewitness about a man wearing "a police uniform or something". Registered in the PO-log.
16:04	Operator Mary informs the Incident Commander and a Delta officer at the government complex about the information from the first eyewitness.
16:05	Kripos calls the Oslo OC. It receives information about explosions and a car.
16:09-16	Four police districts are in contact with the Oslo OC. Three receive some information about a car and/or an armed man in uniform.
16:43	Kripos distributes a national alarm to all police districts informing about explosion(s) in Oslo and a vehicle with an "unknown relation" to the explosion(s).
16:48	The CCG at the Oslo police is fully staffed.
17:29	The Oslo police receives first witness reports of shooting at Utøya.
17:43	The Criminal Investigations post at the Oslo police becomes aware of information registered in the PO-log about an armed man in uniform and his vehicle.
17:46	The Oslo OC informs operative personnel via the police radio about a "suspect wearing a police or security officer uniform".

7.2 Intra-organizational coordination by the Oslo police

7.2.1 At 15:31-15:34. "A man in a security uniform": registering the first observation

At 15:31, a security officer at the security control room in the government complex calls the Oslo OC. Operator Fiona responds:

(…)
Security officer: There has been a car bomb, it was a white van on the outside. (…) It must be a terrorist attack, guaranteed. When the white van had parked, there was a man leaving the car. It looked like he was wearing some kind of security uniform. That is all we know. He left towards the Y-block, then towards *Akersgata* [street name].
Fiona: A man in a security uniform?[70]

The security officer elaborates and tries to describe what he has seen in more detail: A reflex tag on the leg and a white label on the upper arm, looked like he was uniformed as a security officer akin to those working in Securitas and similar companies. Fiona asks about nationality, and the security officer responds that the man appeared to be short, dark skinned and with dark hair. The conversation lasts for three minutes, and Fiona decodes the information from the security officer and registers the following in the PO-log:

Time		UserID
15:32	DESCRIPTION	Fiona
15:33	Security uniform – unknown what sort – possibly NN service?	Fiona
	Small man – reflex on the leg	Fiona
	Not black but dark-skinned	Fiona
	NN – security officer	Fiona

[70] The Oslo police, transcript phone call, 15.31:11-15.34:17.

As can be seen from the entries in the PO-log, the decoding process transformed the three-minute-long conversation to a 23-word summary.[71] Moreover, some of the information the security officer encoded was lost in the decoding and registration process. For example, the information on which direction he went and subtle details about the uniform (white label on upper arm).

7.2.2 At 15:34-15:37. "A specific tip about a car": registering the second observation

At 15:34 one of the assistants at the switchboard at the Oslo police receives an emergency call from a civilian who calls because: "(…) I saw something very suspicious, when I passed by there [the government complex] about fifteen minutes ago (…) There was a man in a police uniform that came walking and sat down". The switchboard assistant interrupts: "Sorry, but I cannot receive this right now, you see, but what is your name?"[72]

The seemingly negative response by the switchboard assistant is given because her primary task at the switchboard is to detect whether incoming calls are actual emergency calls or false. When the call is interpreted as an actual emergency call, the call is forwarded to the operators in the OC. The switchboard assistants have only reading access to the PO-log and can thus not register any information from the callers.

The eyewitness elaborates on what he has seen: "It is a specific tip about a car (…) a car the person drove away in (…) and I have the registration number from the registration plates of the car". The switchboard assistant deems this information as potentially very important and asks the eyewitness to "Just tell me briefly, what was it you saw?" The eyewitness informs about seeing what he "thought was a police officer (…) a man with helmet and police clothes and an open pistol". The eyewitness was puzzled because the man was on his own, entered a gray van and drove away in the wrong direction in a one-way street.

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[71] In its original form, in Norwegian, the registration in the PO-log consists of 19 words.

[72] The Oslo police, transcript phone call, 15;34:50-15:37:11. The phone conversation is also reiterated verbatim in the 22 July Commission report (NOU, 2012, pp. 98–100).

The switchboard assistant decides to deviate from standard procedure, which would be to simply forward the call to the OC. She assesses the information to be of utmost importance. Also, the queue of emergency calls waiting to be followed-up by the operators is long. She is afraid that if she forwards the call it will not get through to the operators. Either because the caller will become impatient and hang up, or because pending calls in the queue might be disconnected after a fixed time period – she is unsure how the functionality of the phone system works under an extreme setting like this. Rather than forwarding the call, the switchboard assistant writes down the contact info of the caller and a summary of what he reported on a notebook (A5-format) she has available (O 13). She ends the conversation by telling the eyewitness, that she has registered his information and that someone will call him back. She rewrites her notes on a new piece of paper in the notebook to make it more readable before walking out of the switchboard across the hall to the OC where the operators and the Operations Commander are located.

Walking over to the OC with handwritten notes was not standard procedure but was done occasionally by the switchboard assistants when they had information they assessed as important. According to the switchboard assistant, entering the OC as a switchboard assistant was always associated with a sense of respect. There was one, and one person only, that you communicated with when entering the OC as switchboard assistant: the one in command, the Operations Commander (O 13).

According to the switchboard assistant, the Operations Commander had a lot of phone lists and other documents scattered on her desk and appeared very occupied. The switchboard assistant makes eye contact with the Operations Commander and tells her something about the note being important before leaving it somewhere at the desk of the Operations Commander.[73] She receives a nod from the Operations Commander as confirmation (O 13).

[73] I write 'somewhere', because the accounts differ a little on this point. According to the switchboard assistant and the operator who came across the note approximately 17 minutes later the note was left at the desk of the Operations Commander (O 10, 13). According to the Operations Commander,

What is clear is that at approximately 15:39[74] two observations of a person in some sort of uniform proximate to the incident scene, had been received by the OC. No one in the OC noticed the note before 15:56, approximately 17 minutes later.

7.2.3 At 15:56-16:02. Coincidental coupling of information and operator

At 15:56, one of the operators (hereafter "Mary") in the OC coincidentally notices the note left by the switchboard assistant. She assesses the information on the note as very important and immediately calls back the eyewitness. The eyewitness retells the story that he gave to the switchboard assistant approximately 20 minutes earlier.

In this conversation, the eyewitness gives a more elaborate description of the man wearing what he believes was a police uniform: "(…) looked European, and I would estimate he was somewhere in his thirties. And from the little I noticed, though it was a relatively weak observation, I would estimate he was about 180 centimetres tall". When questioned whether the man was alone in the car, the eyewitness responds "I think so, but I am not certain".[75] While talking to the eyewitness, Mary conducts a quick search in the vehicle register (*Autosys*) and finds out that the car is a rental car, but does not have capacity, according to her own statement, at the time to conduct further searches to detect the car owner/tenant.[76] From the six minutes long phone conversation Mary decodes and registers the following in the PO-log:

she was unsure whether the note was left on her desk or the desk of one of the operators (O 6).

[74] The phone call between the assistant and the eyewitness ended at 15:37:11.

[75] The Oslo police, transcript phone call, 15:55:43–16:01:45.

[76] Statement given to the 22 July Commission, March 5, 2012 (NOU, 2012, p. 100).

Time		UserID
15:56	WITNESS IMPORTANT INFO	Mary
15:58	Observed a man in a uniform, bulletproof helmet and a pistol out that came walking behind him. This was 5 min explosion [sic].	Mary
	He sat in a van, drove in the wrong direction.	Mary
	Møllergata towards *Hausmannsgata* [street names]	Mary
	It was a gray, little van: license plate VH24605	Mary
15:59	EYEWITNESS NAME: NN phone: xxxxxxxx	Mary
	DESCRIPTION: European looks, 30s, ca 1850 cm tall	Mary
	Man was alone in the car	Mary
16:01	*Car belongs to DNB NOR Bank*	Mary

As can be seen from the entries in the PO-log, the decoding process transformed the six-minute-long conversation to a 74 -word summary.[77] Moreover, some of the information the eyewitness encoded changed its meaning in the encoding-decoding process. For example, the eyewitness asserted he had seen a man in a police uniform – in the PO-log it reads "man in a uniform". Another example, the reported uncertainty on whether the person had left the incident scene alone is absent in the registration in the PO-log: "man was alone in the car". The man was in fact alone, but the two examples illustrate how subtle changes in the encoding-decoding processes can result in major semantic changes of the sentences.

In retrospect, and when reading this description of the sequence of events, it is easy to assume a connection between the observations made by the security officer at the government complex that was registered in the PO-log at 15:31, and the observations made by a civilian that was registered in the PO-log at 15:56–16:01. However, in real time almost thirty minutes passed between the two registrations. Taking into consideration that new lines of information were registered less than every twentieth second during this time period (cf. previous chapter), it was challenging to see the two registrations in combination amidst the surge of incoming streams of information at the OC, the stream of personnel

[77] In its original form, in Norwegian, the registration in the PO-log consist of 69 words.

entering the OC, the stream of problems that needed handling and the streams of police capacities that needed to be mobilized and coordinated.

A final point to be made about the registration made by Mary is that she "flags" the registration for the CCG 2 function (criminal investigations and intelligence). "Flagging" is a function in the PO-log that enables the operators to signal that the information they have registered is of relevance for one (or more) CCG-functions (cf. 6.4.3). But because the CCG had logged on the PO-log in a technically incorrect way (cf. previous chapter), it is not possible for the CCG 2 function to become aware of any flagged information via the PO-log. Almost two more hours pass before the CCG 2 become aware of the car-tip.

7.2.4 At 16:02–16:06. Informing the operative level

Mary ends the call with the civilian at 16:02. Only seconds later, the Incident Commander reports via the police radio to the OC about information he has received from the security personnel in the government complex: "(…) They report from the security office here that a Mercedes van, a pretty big one, has driven in front of the main building here (…) and a man in a security uniform has left the scene. Not Norwegian, not African, somewhere in between. You can get more information from the security office and they can also, later, provide video footage". Oscar at the OC, the operator administering the radio communication, responds: "U05 [code signal for Incident Commander], copy that. This goes to all units: One man in security uniform, not Norwegian, not African, but somewhere in between, left from this car (…)"[78] In the PO-log, the following is registered:

Time		UserID
16:03	U05: it is informed from the security offices that a big van has	Oscar
	driven in front of the main building. A man in a security officer	
	uniform. Not Norwegian, not African – somewhere in between.	

[78] The Oslo police radio transcript, TG-1 16:02:43–16:03:57.

Mary notices the communication on the police radio. She contacts the Incident Commander via the police radio and informs that: "I have just talked to an eyewitness that has met such a car and seen a man that was dressed as you described with a bulletproof helmet and some sort of pistol and that it had driven away from the incident scene. I am checking the registration number now, so you will get more information later. Over." The Incident Commander responds: "Copy that. Delta is working further on that trace. Over."[79] Mary then calls the Delta officer in command on his cell phone to inform him about the information she has. She reiterates the description of the armed man in a uniform and helmet, the car driving the wrong way, the registration number of the car. The Delta officer repeats some of the vital details to make sure he understands what is being said and responds: "We are just assisting the rescue operation here until you have something more".[80]

Why do the Incident Commander or Delta officer not take any measures to try and detect the car? Providing first aid to the critically wounded is the number one priority for the Incident Commander. The second priority is ensuring a secure lockdown of the crime scene.[81] And, because more than forty minutes have passed since the bomb explosion, the Incident Commander assesses it as out of the question to request the OC to redirect police units from the government complex to control car traffic at traffic hubs around Oslo (Oslo Politidistrikt, 2012a, p. 55). Thus, the Incident Commander prioritizes his capacities based on what he knows. He knows there has been a bomb explosion with potentially high number of casualties and wounded. The information on a possible perpetrator is less certain, especially because it is unknown where he currently is.

[79] The Oslo police radio transcript, TG-1 16:04:26–16:05:34
[80] The Oslo police, transcript phone call, 16:05:56-16:07:48
[81] See, *The report of the Incident Commander* , downloaded 27 February, 2015. URL: https://www.abcnyheter.no/nyheter/2011/10/19/139485/innsatsleders-rapport

7.2.5 At 16:03-08. "A man (…) wearing a police uniform or something": registering the third observation

Simultaneously as Oscar receives information from the Incident Commander via the police radio about a man in a uniform, another operator, Jon, answers an incoming emergency call, which turns out to be another reported observation of a man "(…) dressed in this type of police uniform with a visor (…)". Jon asks the eyewitness to "just tell me briefly what you saw". She describes how she heard the explosion while she was out for a walk with her dog. Jon excuses himself because he is struggling to hear everything that she says due to the intensity in the OC: "You said something earlier, I am sorry I did not catch it, but there are a lot of things happening simultaneously right now. There are ten men sitting around me and talking. So if you could be so kind to repeat what you said initially". The eyewitness elaborates what she said initially: "Before it happened [the explosion] I saw a man coming from over there wearing a police uniform or something, looked like he had a baton and this type of visor helmet. You know, the type you use when confronting protesters and so on. I just thought that…. and he was alone (…)".[82] The entire conversation lasts for a bit more than four minutes. Jon decodes and registers the following in the PO-log:

Time		UserID
16:05	EYEWITNESS:	Jon
16:07	NN, phone number xx. Heard explosion and saw explosion.	Jon
	Before expl she saw a man leaving the scene in a police	
	uniform.	

As can be seen from the entries in the PO-log, the decoding process transformed the four-minute-long conversation into a 23-word summary.[83] Moreover, some of the description of the man was lost in the encoding-decoding process. For example, that he was wearing a baton and a visor helmet. The example illustrates

[82] The Oslo police, transcript phone call, 16:03:28–16:07:45.
[83] In its original form, in Norwegian, the registration in the PO-log consists of 22 words.

how encoding-decoding processes can result in details getting lost, resulting in major semantic changes of the message being communicated.

7.2.6 Preliminary discussion: non-couplings, information loss and inaction

Thus far I have examined how the Oslo police handled the eyewitness observations of an armed man in uniform they received in the time span 15:25–16:08 confined to the intra-organizational coordination. In the examined time span, the Oslo police received three information streams containing information about an armed man in some kind of uniform, cf. table 7.1.

Table 7.1: Oslo police handling of reported observations of an armed man in uniform and his car.

	Time	Sender	Re-cipient	Channel	Du-ration	Encoded message (excerpts)	Actions
1	15:31 -34	Security officer	OC (Fiona)	Phone	3.06 min	'…When the white van parked [at the government complex] a man came out of the car… Looked like he was wearing some sort of security officer uniform, reflex on the leg and a white tag on the overarm… A small man with dark hair…'	Registered in the PO-log: 'Security uniform – unknown what sort – possibly NN service? Small guy – reflex on the leg. Not black but darkly skinned. NN – security officer.'
1	16:03 -04	Incident Comma nder	OC (Oscar)	Police radio	1.14 min	'Informed from the security central here that a Mercedes van, pretty big one drove in front of the tall block…A man in a security uniform left the scene. Not Norwegian, not African, somewhere in between'.	Registered in the PO-log: 'it is informed from the security offices that a big van has driven in front of the main building. A man in a security officer uniform. Not Norwegian, not African – somewhere in between'
2	15:34 -37	Eye-witness 1	Switch-board	Phone	2.21 min	'…There was a man in a police uniform… It is a specific tip about a car… I have the registration plate, VH24605...A grey van… A man with helmet, police clothes and a pistol… Drove the wrong way in a one-way street…	Brief summary and contact information written on a note and then put on a desk in the OC.
2	15:56 -16:02	Eye-witness 1	OC (Mary)	Phone	6.02 min	'Five minutes before the explosion... I passed a man in police clothing, a visor helmet and a pistol… He entered a car and drove the wrong way towards Møllergata… VH 24605… Appeared to be of European origin, somewhere in his thirties… around 180 centimetres tall… Think he was alone, but not certain.'	Registered in the PO-log: Observed a man in a uniform, bullet proof helmet and a pistol out that came walking behind him. This was 5 min explosion. He sat in a van, drove in the wrong direction. Møllergata towards Hausmannsgata. It was a grey, little van: license plate VH24605. EYEWITNESS NAME: NN phone: xxxxxxxx. DESCRIPTION: European looks, 30s, ca 1850 cm tall. Car belongs to DNB NOR Bank'. Subsequently informs the Operations Commander and the operative level (cf. the next two rows)
2	16:04 -05	OC (Mary)	Incident Comma nder	Police radio	1.08 min	Just talked to an eyewitness that have met such a car and seen a man that was dressed as you described with a bullet proof helmet and some sort of pistol and that it had driven away from the incident scene	No action taken.
2	16:06 -08	OC (Mary)	Delta officer	Phone	1.52 min	'I have information about the car…that may have been involved in this… came a person in some sort of uniform with a bullet-proof helmet and a pistol… sat in a silver Fiat… drove in the wrong direction in Møllergata… Europeean looks, 30 years and approximately 180 cm tall… VH24605'	No action taken.
3	16:03 -08	Eyewitn ess 2	OC (Jon)	Phone	4.17 min	Before it happened I saw a man… wearing a police uniform or something… looked like he had a baton and this type of visor helmet… and he was alone'.	Registered in the PO-log: 'NN, phone number xx. Heard explosion and saw explosion. Before expl she saw a man leaving the scene in a police uniform'

One interesting observation from the first information stream is that information streams with same information from the same source (the security central at the government complex) can go through different channels (phone and police radio) and the end result may differ, cf. the two quadrants in the column furthest to the right. Although both registrations mention a security uniform, they differ to some extent on the descriptions of the observed man.

One observation that the second information stream epitomizes is how information gets "lost" and transformed in encoding-decoding processes. While talking to the eyewitness, Mary had to think of good follow-up questions in order to get the most relevant information, and at the same time she had to register what the eyewitness said. This is a challenging task and an integral part of working at the OC. Thus, information loss is inevitable, the challenge is not to lose any of the important information. And, at the outset, it is not always evident what part of the information is most important.

One more general and puzzling question that can be derived from the analysis thus far is why the Oslo police had not yet, by 16:08, implemented any measures to try and detect the car and/or the armed man in uniform? Four actors could have taken action: the OC, Delta or those in command at the operative or intermediate level (the CCG). But none of them did – why not?

Apart from the magnitude of the incident and the surge of incoming information streams, the absence of de facto command at the OC appear to play a significant role in case of the OC. The Operations Commander felt more like an operator than an Operations Commander the first hour of the operation. She was preoccupied with alerting and mobilizing relevant police capacities such as Delta, the commissioner and members of the CCG. As demonstrated in chapter 6, this took a long time because she had to do it manually by calling one person at a time. Moreover, according to her own statement, the Operations Commander would have ensured that the information she received from operator Mary, the car-tip, was forwarded to the operative personnel on the police radio if she had had more capacity (O 6). She could also have informed the CCG on one of the briefs she gave them, but she did not. This indicates that the Operations Commander was only loosely coupled with the car-tip, i.e. she had noticed the

car-tip, but the information had not manifested itself as an integral part of her on-going efforts to make sense of what was going on.

For those in command at the operative level and Delta, the explanation is the timing of when they were coupled with the car-tip. Forty minutes had passed since the explosion when Mary informed the Incident Commander and the Delta officer at the incident scene about the car-tip. For them, the information was too vague to be prioritized over other urgent issues such as giving lifesaving aid to wounded and clearing the incident scene. Furthermore, it was likely that the reported man had exited Oslo and possibly also had left the car.

For the CCG, the simple explanation is that it was not coupled with the car-tip, and how can you implement measures to try and detect something you are unaware exists? A more elaborate explanation of the non-coupling is that there was a significant lack of coordination between the CCG and the OC. There were parallel lines of communication and uncertainty about who did what (cf. chapter 6), which caused confusion – and non-couplings of important information.

More than two hours passed before the Oslo police implemented measures to try and detect the reported car and before the operative police personnel in Oslo was informed about a possible suspect in uniform. At 17:43, the CCG 2 became aware of the car-tip in the PO-log, which Mary registered one and a half hours earlier (Oslo Politidistrikt, 2012a, pp. 115–116). At 17:46, the OC communicated via the police radio: "an important message to all units [i.e. all operative police personnel]: Both related to the explosion at the government complex and the shootings at Utøya in Nordre Buskerud a suspect has been observed wearing a police or security officer uniform".[84] Interestingly, this information did not stem from one of the three information streams reiterated in table 7.1. The source of this order was information the CCG 3 had received directly from the Incident Commander, who had received it from a fireman who reported that he had seen a man in a uniform (NOU, 2012, pp. 96–97). In other words, this latter information was a new information stream. This indicates that

[84] The Oslo police, transcript TG1, 17:46:41–17:47:24.

the CCG was unaware of any information of a man in uniform and his car until the two aforementioned information-couplings at 17:43 and 17:46 respectively.

7.3 Inter-organizational coordination

I now turn to the inter-organizational coordination, i.e. how the information about the car-tip was forwarded from the Oslo OC to other police districts. I examine when and how the information was forwarded. Within the time span of fifteen minutes (16:03–16:18), five attempts were made to forward the information to the OCs in four police districts and to the national police agency Kripos, respectively. Thus, the information stream that originated from the eyewitness whom Mary called back at 16:56 could be split up into five information streams. There could be five new information-couplings followed by enacting measures to try and detect the car by the recipients of the information. However, as I demonstrate in the subsequent sections, information got lost or transformed in the encoding-decoding processes, and few measures were enacted.

7.3.1 At 16:05–16:08: The idea of sending a national alarm emerges

Simultaneously as Mary is talking with the Incident Commander and Delta respectively (cf. previous sub-chapter), the manager staffing the desk at Kripos calls the Operations Commander in the Oslo police to offer Kripos' assistance. As described in chapters 4 and 5, Kripos is a national police agency that has the responsibility for operating the police internal alarm system, i.e. Kripos is expected to distribute national alarms upon request from the police districts (Politidirektoratet, 2010a).

During the conversation between the Kripos manager and the Operations Commander at the Oslo police, an idea to distribute a national alarm emerges:

> Kripos: We were wondering if it is possible to get a little bit of information from you.
> Operations Commander (OpCom): Yes, I meant to call you, I should maybe have called you some time ago (…) It is a bit unclear, but it is said that there has been a bomb in the government complex.

Kripos: One or two?
OpCom: It is said two, and possibly, possibly, more that have not yet detonated. (…) unclear yet, but it is said one dead and five wounded, and more (…) We are trying to get an overview gradually.
(…)
Kripos: Is there anything – do you wish any assistance from us?
OpCom: Yes, well, you could of course, well, it could maybe be interesting to maybe alarm, to send a national alarm.
Kripos: Yes, and what should it contain?
OpCom: No, well, it is interesting that a car has been spotted here. A gray, small van. VH24605. So if you could distribute a, a national alarm that there has been an attack here, and that the police districts actually keep it a little in mind.
Kripos: The car?
OpCom: Yes. And all other activity, because it could be interesting regarding the national borders. Maybe alert the Customs, who are present at most borders at least.
Kripos: Yes.
OpCom: Let's see, it is five explosions.
Kripos: five explosions?
OpCom: Yes, possibly. So, if you get a national alarm on it.
Kripos: Yes, but no assistance needed from us apart from that?
OpCom: No, not for now at least.
(…)[85]

In hindsight, it seems puzzling that the Operations Commander reports that there have possibly been five explosions. In real time, however, there was still uncertainty at this point regarding the number of explosions. For example, the Incident Commander had reported approximately 25 minutes earlier that there had been two explosions at the government complex, and the OC received reports of explosions from ten different locations in the first 15 minutes after the explosion. One of the reports turned out to be an actual explosion, though not caused by a terrorist attack but a working accident (cf. chapter 6).

It is clear from the conversation that the Operations Commander at this point is informed about the car with registration number VH24605. But it is also clear that she is only loosely coupled to the information about the "car-tip" that

[85] The Oslo police, transcript phone call, 16:04:56–16:08:03.

Mary registered in the PO-log. The Operations Commander gives neither any descriptions of the driver, nor any indication on what status the car has and whether the car has any relation to the explosion apart from saying that "a car has been spotted here". Thus, as the information stream containing the "car-tip" flows from the Oslo police to Kripos important pieces of the information get "lost".

The Operations Commander regards it as up to Kripos to specify the content and formulation of the national alarm from their phone conversation. Kripos has no access to the Oslo police's PO-log and is thus left with the written notes the Kripos manager made during the phone conversation.

The desk at Kripos is normally staffed with two police officers, but this Friday afternoon, the manager is alone, and the number of incoming calls is high. Moreover, it is unclear to the manager what the Operations Commander at the Oslo OC meant with having the car "a little in mind". The Kripos manager assesses the information as poor and vague (NOU, 2012, p. 150). In other words, he struggles to decode this part of the message and make sense of it. Because he is alone at the desk and assesses the information received from the Oslo OC as vague, the Kripos manager prioritizes answering incoming calls rather than preparing to send out a national alarm. He also wants to wait and see if he will receive more concrete information (ibid).

Some minutes later a colleague arrives at the desk. The Kripos manager hands him his written notes from the phone conversation with the Oslo police, and tells him to send a national alarm. At 16:43, 78 minutes after the bomb explosion and 68 minutes after the Oslo police received information about the car-tip the first time, Kripos distributes an email to all police districts via the email based national alarm system:

> National alarm - Explosion Possible bomb (s) in downtown Oslo
> We refer to media reports on the case. We request you be on the lookout for a small gray van, possible registration number 24605. There is currently an unknown relation between the explosion and the vehicle, but if it is observed, alert Kripos or the Oslo police for further instructions. It is requested to exercise proportional caution when approaching the vehicle. Further information will follow (NOU, 2012, p. 150).

This email is the first of three emails that are sent via the police national alarm system on 22/7. As can be read from this email, the letters (VH) of the registration number are missing. Thus, as the information "shifted" from the Kripos manager to his colleague, more important details got lost – in addition to the details lost in the exchange between the Operations Commander in the Oslo police and the Kripos manager. More generally, there is not much left of the information that the eyewitness gave.

The email via the national alarm system is the first information distributed jointly to all police districts via the national level. The email is not easy to interpret for the police districts. They are ordered to be on the lookout for a car with an "unknown relation" to the explosion. What is more alarming is the fact that very few of the 27 police districts notice and register the email sent from Kripos. The operators are expected to register any information about current events of significant relevance for the police district in the PO-log. I would argue that any email sent via the national alarm system would qualify as being of significant relevance to all the police districts. The 22 July Commission examined the PO-logs from all the police districts looking for references to the first email sent via the national alarm system. Such a reference was found in only two of the total 27 PO-logs (NOU, 2012, p. 151) (cf. also chapter 5).

7.3.2 At 16:09-16:11. The Asker and Bærum police offer assistance

At 16:09, only a couple of minutes after Mary ended her talk with a Delta officer, Mary responds to an incoming call from the Operations Commander at the Asker and Bærum police district (ABPD).

(…)

ABPD: Let us know if you need any assistance (…) Do you have any information about a car or anything that is relevant?

Mary: We have just received a message now, I do not know if it has anything to do with the incident, but it is a little. An eyewitness that had met a man wearing some sort of uniform, a bulletproof helmet and a pistol. Enters a van five minutes before the explosion, with the following registration number: Victor Hotel.

ABPD: Yes.

Mary: 24605.

ABPD: 24605

Mary: And drove in the wrong direction in a one-way street. That is the last information I have, we do not have anything more, except several reports indicating there was a van at the explosion.

ABPD: Yes, we received a tip now (…) A woman called us (…) she sat in a car outside Gunerius [a shopping mall located 500 metres from the government complex] and upon the explosion she noticed a Whisky Whisky Yankee Golf 237 with a dark-skinned man inside the car. He drove very, very fast and they followed him until the Majorstua intersection before they lost him.

(…).[86]

Mary asserts that she does "not know if it [the information she forwards] has anything to do with the incident". A reasonable interpretation is that Mary is uncertain about how to actually interpret the information she received ten minutes earlier from the eyewitness she called. Mary decodes the information she has received from the Asker and Bærum police about a suspicious car at Gunerius and registers it in the PO-log. This is the first time the Oslo OC receives a report about another suspicious car, and the information is more vague than the first eyewitness observation. The Asker and Bærum Operations Commander decodes and registers the following information from the two-minute-long conversation with Mary:

Time		UserID
16:33*	OC Oslo received a tip about possibly relevant car that has	xxx
	been at the incident scene: silver coloured car with reg nr.	
	VH24605. The car had driven the wrong way in a one-way	
	street towards the explosion according to witnesses	

*The time refers to the time the information was registered in the PO-log, not the time the conversation took place.

The registration number of the car is registered and that the car is "possibly relevant". However, none of the descriptions of the driver that Mary gave

[86] The Oslo police, transcript phone call, 16:08:46-16:10:57.

[uniform, bulletproof helmet, pistol] is registered in the PO-log. The Operations Commander then reads a so-called 98-message, i.e. message to all units, to its police units in the police district informing about the car, that the police units should observe and report back if the car was observed (NOU, 2012, p. 103).

7.3.3 At 16:15–16:17: Alerting the other adjacent police districts

After ending the call with the Asker and Bærum police, Mary calls the OCs in the two other police districts that are adjacent to Oslo: the Romerike and Follo police. Several of the main roads out of Oslo go through the two police districts.

The conversation with the Romerike OC lasts less than a minute. Mary informs that "related to the explosion there is a car that we would like to be checked if you come across it". She reads the registration number, but she also adds that "There are eyewitness reports that make what happened right before the explosion very strange, so we do not know if the perpetrator could be in the car or anything".[87] Thus, Mary signals an uncertainty concerning what status the car has. Moreover, she says nothing about the man who has been observed driving this car. The Romerike OC registers the following in its PO-log:

Time		UserID
16:16	CONTROL VEHICLE [OSLO] – THE OSLO POLICE 0001	xxx
	Reported that a Fiat van, belonging to Norges bank with reg	
	nr. VH24605 has acted suspiciously in Oslo. Wants this car to	
	be checked if it is encountered	

The Romerike police does not implement any measures to detect the car except that the police units should be on the lookout. At 17:37, supplementary information about the car is added in the PO-log: "If the aforementioned car is encountered, contact the Oslo police for instructions" (Romerike PO-log, 17:37). Furthermore, about twenty minutes later, the following is registered in the PO-log: "NN reported they have information from Oslo that the suspect may be

[87] The Oslo police, transcript phone call, 16:14:49–16:15:44.

wearing a security officer uniform or a police uniform. Operative personnel are alerted" (Romerike PO-log, 17:54). While the first message from the Oslo police to the Romerike police contained only information about the car with no reference to a man in uniform, the latter message about a man in a uniform seems to have been given without any reference to the car, at least based on what is registered in the PO-log. In other words, the initial information stream about a man in a uniform and his car has, on its way to the Romerike police, transformed into two separate information streams with seemingly no reference to one another.

After having alerted Romerike OC, Mary immediately calls the Follo OC. She informs that there is a car "(…) they would like that they check if they encounter it". She lists the registration number of the car, that it is a rental and that "(…) witness information received just before the explosion indicates that this [car] may have something to do with it."[88] She also informs that the car has been observed driving in the wrong direction in a one-way street just before the explosion and that the car was driven by a man wearing some kind of uniform, bulletproof helmet and a pistol – the information about a uniform, helmet and pistol is repeated. While the relation between the car and the explosion was reported as unknown to the Romerike OC, Mary reports to the Follo OC that the eyewitness information indicates that the car "may have something to do with it".

There are also interesting differences in how the respective Operations Commanders in Romerike and Follo respond to the information they get from Mary. The Romerike Operations Commander responds by giving short, simple confirmations: "yes" and "no". The exception is the number of the registration plate, which the Operations Commander reiterates. Brief responses are good in the sense that they are efficient. At the same time, a brief response increases the risk of misconceptions. In contrast to the Romerike Operations Commander, the Follo Operations Commander i) asks questions of clarification: "right, so (…) we should simply be aware of this car?"; ii) reiterates parts of the messages that

[88] The Oslo police, transcript phone call, 16:15:44–16:17:25.

are sent: "… so he had a helmet yes, and a pistol and uniform"; and, inform in return what he/she intends to do with the information received from Mary: "… will get it out to the units we have". In short, the difference is that the Follo Operations Commander, in contrast to the Romerike Operations Commander, is explicit on how he/she decodes the messages from Mary.

In its PO-log the Follo Operations Commander decodes and registers the following:

Time		UserID
16:17	"01" [code signal for THE OSLO POLICE] report they do not have so much	xxx
	info yet after the explosion in downtown Oslo. Preliminary	
	witness information directs the attention towards a car for	
	observation: VH 24605. This is a leasing/rental – not reported	
	stolen. Was observed not far from the incident scene just	
	before the explosion. One uniformed male (possibly security	
	officer uniform or similar) wearing, according to witnesses, a	
	bulletproof helmet and a pistol in his hand, entered this car	
	just before the explosion	

All the details that Mary encoded are maintained in the registration in the PO-log. Moreover, at 16:30 the Follo police establish control posts on three locations on central freeways that go out of Oslo and through Follo police district (Follo pd PO-log). According to one who worked in the Follo CCG on 22/7, the control posts were set up to potentially stop perpetrators fleeing Oslo. The idea of potentially stopping perpetrators was not directly linked to the tip about the car, which they received from the Oslo police, but is standard procedure when larger incidents occur in Oslo, like bank robbery or murder (F 3). This begs the question why other adjacent police districts did not implement similar measures right away. The Asker and Bærum police established an observation post at freeway E 16 at a later point (see chapter 8). My data material does not give grounds to

conclude with certainty on this question, but I allude to some possible explanations in the next chapter.

7.3.4 At 16:16–16:18: The Vestfold police offer assistance

While Mary is busy alerting the Romerike and Follo OCs respectively, Vestfold OC calls the Oslo OC to offer its assistance. The operations commander in the Vestfold police informs that they can send one police unit to the Oslo police if necessary. Moreover, Vestfold OC has mobilized all available UEH-units in the police district "so I have just to push the button if you were to send a request".[89] The call is answered by Jon, the operator who received the third eyewitness observation of a man in uniform. As described in 7.2.5 Jon is unaware of the earlier registrations in the PO-log about an armed man in uniform and his car. As he has no knowledge of such a car, he does not mention any information about it, nor about the observations of a man in uniform, to the Operations Commander in Vestfold. In the PO-log Jon registers that Vestfold police has mobilized its UEH-units.

7.3.5 Discussion: Five potential information-couplings, two actions

As shown in the previous sections, the information stream that originated from the eyewitness Mary called at 15:56 was split up into five potential information streams. Four new information-couplings were created, and one non-coupling (the Vestfold police), cf. table 7.2. There is a "double discrepancy" between the four information-couplings that were created and the initial information stream that they originated from.

[89] The Oslo police, transcript phone call, 16:16:17–16:17:41.

Table 7.2: Summary of how the 'car-tip' was handled.

	Time	Sender	Recipient	Channel	Duration	Encoded message (excerpts)	Decoded (excerpts)	Actions
1	16:05 -08	OpCom	Kripos*	Phone	3.07 min	'It is observed a car here… a grey, little van… VH 24605… if you could distribute a, a national alarm that it has been an attack here, and that the police districts actually keep it [the car] a little in mind.'	'(…) On the lookout for a small grey van, possible registration number 24605 (…) Currently an unknown relation between the explosion and the vehicle	National alarm sent 35 min later.
2	16:09 -11	Mary	ABPD*	Phone	2.11 min	I do not know if it has anything to do with the incident, but it is a little.. An eyewitness that had met a man wearing some sort of uniform, a bullet proof helmet and a pistol. Enters a van five minutes before the explosion… Victor Hotel 24605…And drove in the wrong direction in a one-way street.	A possible relevant car that has been at the incident scene: silver coloured car … VH24605 … driven the wrong way in a one-way street towards the explosion'	Operative units told to observe for the car
3	16:15 -16	Mary	Romerike	Phone	0.55 min	'…related to the explosion there is a car that we would like to be controlled if you come across it…VH24605… silver coloured Fiat van belonging to *Norges bank* … we do not know if the perpetrator could be in the car or anything'	'…a Fiat van, belonging to Norges bank with reg nr. VH24605 has acted suspiciously in Oslo. Wants this car to be checked if encountered.'	Operative units told to check the car if it is encountered**
4	16:16- 17	Mary	Follo	Phone	1.41 min	'…A car we want controlled if you come across it. VH 24605… A silver grey Fiat van… not stolen… belongs to DnBNor Bank… witness information received just before the explosion indicates that this [car] may have something to do with it..... driving in the wrong direction just before the explosion … driven by a man in some kind of uniform, bullet-proof helmet and a pistol… good if you can inform about that…'	A car VH24605 observed not far from the incident scene just before the explosion. One uniformed male (possibly security officer uniform or similar) wearing, according to witnesses, a bullet-proof helmet and a pistol in his hand, in car	Three control posts on central freeways
5	16:16 -18	Jon	Vestfold*	Phone	1.24 min	No information given	-	-

*They initiated and established the contact.

** This is based on the registered information in the PO-log. I do not know for certain that a message like this was communicated orally to the operative police units.

There was a substantial discrepancy between what information was originally registered in the Oslo police's PO-log by Mary and the subsequent messages the respective senders at the Oslo OC (Operations Commander, Mary and Jon) encoded to the recipients at Kripos and the adjacent police districts. This indicates that the operators and the Operations Commander in the Oslo OC were only loosely coupled with the "car-tip", and operator Jon was possibly not coupled with the information at all. Even Mary, who initially decoded the information from the eyewitness and registered the "car-tip" in the PO-log appears to have been only loosely coupled with the car-tip, which may seem puzzling.

Why were they loosely coupled to the car-tip? I will highlight four factors which I assert played an important role. First, they had to rely on oral communication similar to the "telephone game".[90] Every time the message was subject to an encoding-decoding process, parts of the sentence(s) were lost or changed their meaning. This was the case even when it was the same person who was the sender; every time Mary reiterated the original information, she said it in a slightly different way, and used different formulations and descriptions. Second, although the original descriptions were detailed, there seems to be uncertainty among the operators in the Oslo OC on how confident they could be that the "car-tip" had a link to the explosion. Was the observed man one of the perpetrators, or was there no link between the observed man and the explosion? Third, it was very difficult at the time to browse the PO-log for information because it had no search-function and the screen "jumped" back to the latest registration every time a new registration was made, which was every twentieth second during the first hour (cf. chapter 6). Fourth, the Oslo OC had limited crisis coordination capacity and the magnitude of the explosion was unprecedented.

[90] The "telephone game", also known as "Chinese Whispers" (in British English), refers to the popular children's game where players form a line, and the first player comes up with a message and whispers it to the ear of the second person in the line. The second player repeats the message to the third player, and so on. When the last player is reached, they announce the message they heard to the entire group. The first person then compares the original message with the final version, which typically is something quite different form the original message.

The car-tip, and the two other reports of an armed man in uniform came amidst numerous other information streams, streams of personnel entering the OC, the gradual transition to CCG (cf. previous chapter) and a stream of problems that needed to be handled. Furthermore, the operators had limited relevant experience and training to draw on.

There was also a discrepancy between the messages the personnel at the Oslo OC encoded and what was decoded and registered in the respective police districts and the national police agency Kripos. This indicates that the recipients were only loosely coupled with the respective messages that the Oslo OC communicated to them. Why were they loosely coupled? I emphasize three factors I argue played a significant role.

First, the limited options for information sharing across police districts. In practice the only viable option was to communicate orally via telephones. The new digital emergency response communication system (ICCS) that the Oslo police and the adjacent police districts had started using, did in fact allow for sending text messages to other police districts that also used ICCS. Thus, in theory, the Oslo OC could have used this function on 22/7. However, the ICCS was still a relatively new communication system for the operators, and, I would argue, its more advanced functions were relatively unknown to the operators and thus unlikely to be used. For instance, the ICCS allowed for joint radio communication to the police, the Fire and Rescue Service and the pre-hospital emergency service on a designated channel. Although this was one of the most significant enhancements of the new communication system, it was only communicated on the channel for a total of seven minutes on 22/7, never by the police (DNK, 2011).

Second, it was unclear for the recipients of the messages what to do with the information they had received. One could argue that the senders should have given the recipients explicit guidance on what to do with the information. Well, both the Operations Commander (to Kripos) and Mary (to the adjacent police districts gave guidance on what to do. The Operations Commander suggested sending an email via the national alarm system, but was unclear on what the content of the email should be. Mary also gave guidance. To both the Romerike

and Follo police she said that there was a car that the Oslo police wanted them to check if they encountered it. In the first dialogue with the Asker and Bærum police however, Mary did not give any guidance on what they should do with the message. It could still be argued that those at the Oslo OC should have been more explicit and given more tangible and specific commands such as "establish control posts on roads x and y". There are two important comments to such a critique. First, those at the Oslo OC did not know it was the perpetrator and the getaway car, or that he was on his way to execute a second terrorist attack. It is clear from several of the inter-organizational dialogues that those at the Oslo OC were unsure on the status of the car-tip and how to make sense of it. Second, the norm has been that the OCs operate and coordinate within their respective police districts (cf. chapters 4 and 5). The OCs have therefore not been accustomed to giving guidance or orders to other OCs or to police personnel outside own jurisdiction.

Third, few of the recipients were explicit on how they decoded the messages they received, which increased the risk of misconceptions. More generally, there is reason to believe that the pervasive uncertainty on what to do with the car-tip, both at the Oslo OC and the recipients in other police districts and Kripos was intensified by the limited relevant experience the OCs had. They had not developed pre-existing structures practices for swift inter-organizational information sharing in crisis settings. The 22/7 attack was not only unprecedented as a crisis incident for the Norwegian police, but some of the specific settings the police personnel were put in, such as handling the car-tip across organizational borders, were very rare, if not unprecedented, situations for those involved.

7.4 Conclusion

In this chapter I have examined how the police handled and coordinated the information streams the Oslo police received about an armed man in uniform leaving the government complex only minutes before the explosion. The Oslo police received three such information streams; one even included the

registration number of the car he drove away in: the car-tip. Based on extensive data documentation, reproducing what happened in real time, I have traced the "journey" of the car-tip from its first reception at the switchboard in the Oslo police to the inaction and measures that were implemented by the Oslo police, Kripos and other police districts to try and detect the car and/or the armed man in uniform.

In the aftermath of 22/7, the story re-examined in this chapter became the story of the "yellow note" (e.g. Grinde, 2012). The note "turned" yellow because the leader of the 22 July Commission described it as a "yellow note" when presenting the 22 July Commission report to the media. More importantly, the story of the "yellow note" became the story about a flawed alarm system and operative errors (cf. also chapter 5). In contrast, a main argument of this chapter is that what in hindsight may appear as obvious operator errors – not taking immediate action on reports about the terrorist and his getaway car – can be construed as reasonable actions from the perspective of the respective actors when analyzing the sequence of actions in real time based on the information the actors had, and situating the actions and events in their broader organizational and institutional setting.

Limitations in the communication technology "forced" the police personnel to share the car-tip orally and by handwritten notes. If they had had a well-functioning system for sharing written information this could have mitigated the risk of information getting lost the way it was on 22/7 as shown in this chapter. Put bluntly, the coordination of the car-tip can, in this regard, be perceived as a round of the "telephone game" under extreme conditions. Important details of the original version of the car-tip were lost on the journey, which in itself, combined with the uncertainty of the status of the content of the car-tip, is an important explanation why many of the recipients of the car-tip did not implement proactive measures to try and detect the car and/or the armed man in uniform. Most were only loosely coupled with the car-tip, some were coupled so late that it was deemed as not reasonable to prioritize the issue from their vantage point, and some were never coupled with the car-tip at all.

To be sure, it could still be argued that those involved could and should have responded differently. For instance, the switchboard assistant should have made sure that the Operations Commander got her handwritten note, the Operations Commander should have immediately asked Kripos to distribute a national alarm, and the Oslo OC should have immediately alerted its operative units and adjacent police districts. However, I contend that their actions can be deemed reasonable given their preconceptions of the roles they had in the organization, their designated role in the actual operation combined with the physical location and information they had at the time they enacted their actions. They lacked crisis coordination structures and practices that would have increased the likelihood for them to take performance-relevant actions.

8 The Initial Response by Other Police Districts and the POD

"Those who worked on the OC on 22/7 felt frustrated because they received no information from the national level during the presumably most dramatic incident [in Norway] in peace time"

Excerpt of a letter from one police district to the internal evaluators

"The police district considered Friday afternoon/evening to offer UEH-units to assist the Nordre Buskerud police. But it was decided to await a formal request for assistance from the relevant police district"

Excerpt of a letter from another police district to the internal evaluators

8.1 Introduction

In this chapter, I shift analytical focus from Oslo and the Oslo police, to other police districts in the vicinity of Oslo, and to the POD at the national level. The bomb explosion was in the government complex where many of the ministries are located, thus, the political center of Norway had been subject to a terrorist attack. In the early 2000s there had been several terrorist attacks in the western world where a first attack was followed by one or several more attacks within a short time-span, e.g. 9/11 in 2001, the bombings in Madrid (2004) and London respectively (2005). Thus, until the police had more information on what had happened and who the perpetrator(s) were, there were good reasons for preparing for a possible second terrorist attack. Moreover, given the magnitude of the explosion it could be expected that the Oslo police would need assistance from police districts in the vicinity of Oslo. For these reasons, I would argue it was reasonable to expect that the police districts in the vicinity of Oslo would make necessary preparations for a possible second attack and a possible request for assistance from the Oslo police. Furthermore, given the POD's strategic role at the national level, and that the POD, according to police crisis preparedness guidelines, could issue orders and coordination actions towards the police districts, I would expect the POD to try and take a coordinating role. At the same time, based on the reasoning in chapters 4 and 5, there is reason to expect that the POD would struggle to take a coordination role in the immediate aftermath of the bomb explosion.

The ten police districts in vicinity to Oslo responded quite differently to the reports about an explosion in the center of Oslo. Five out of the ten police districts enacted mobilizing measures within own police district, while the remaining five did not. Some simply awaited the situation and any request from the POD or the Oslo police, other acted on their own behalf. The reaction of the POD is puzzling as it gave few instructions to the police districts and the national anti-terrorism procedures were never enacted. The procedures list relevant measures that can be implemented in the event of a terrorist attack such as relevant capacities to mobilize and the closing of international borders.

In contrast, hospitals in the vicinity of Oslo raised their preparedness level to the highest level within the first couple of hours. The biggest hospital in Oslo (*Oslo Universitetssykehus*) and a big hospital (*A-hus*) in vicinity of Oslo did it within an hour, while three smaller hospitals (*Bærum, Ringerike, Drammen*) did it at 17:45 (Lereim et al., 2012, pp. 132–141). The Armed Forces raised its preparedness level at 17:30. Why the hospitals and the Armed Forces raised their preparedness level when they did and not sooner or more slowly, falls outside the scope of this thesis. They are mentioned here to illustrate that other first responder organizations raised their preparedness level on 22/7. In the police, some did while others did not.

Why did the POD not take a more proactive role in coordinating the mobilization of police capacities upon the bomb explosion? Why was the response by the police districts in proximity of Oslo mixed?

The word proactive in the question formulation refers to the responsiveness of the directive actions taken, which I have conceptualized as the function of the scope of the total volume of capacities that are mobilized, and how swiftly action is taken upon becoming aware of the problem. Building on arguments made in chapter 4, I argue that the crisis preparedness guidelines were ambiguous regarding what role the POD would take in the event of a crisis. Moreover, these ambiguities were reinforced by the fact that its crisis coordination capacity was de facto limited. The reactive response by the POD was a consequence of limitations in the pre-existing crisis coordination structures and practices combined with a poor problem-fit at the POD CCG on 22/7. The mixed response by the police districts was largely a consequence of pre-existing ambiguities in the organizational design regarding inter-organizational crisis coordination, the lack of inter-organizational crisis coordination prior to 22/7, the lack of operation orders from the POD, the lack of request for assistance from the Oslo police, combined with the existence of different preconceptions among the police districts on *when* it was time to mobilize and *what* capacities to mobilize.

In the next two sub-chapters I outline the response by the POD (8.2) and the response of selected police districts, most of them located in proximity to

Oslo (8.3). Then I summarize the analysis of the police districts' response, discuss the uncertainties that emerged on who was coordinating the mobilization, and I explain central events by utilizing the multiple streams framework (8.4), before I conclude (8.5).

8.2 The POD's response

As pinpointed in chapter 4, the crisis preparedness guidelines stated that the POD can take a central coordinating role if a predatory crisis occurs. But the "can"-formulation made it unclear what role the POD would take, because the lists of the POD's tasks and responsibilities were formulated as "can"-sentences, i.e. they were tasks and responsibilities that the POD could take in the event of a crisis. In the remainder of this subchapter, I highlight the main reasons for the POD's reactive performance: the ambiguous guidelines, its limited crisis coordination capacity, the poor problem-fit at the POD CCG on 22/7 and few streams of incoming verified information.

8.2.1 Limited crisis coordination capacity at POD

In chapter 4 I argued there were limitations in the POD's crisis coordination capacity, and it was further reduced due to the timing of when the terrorist attacks occurred. The POD lacked several of its most experienced personnel on 22/7. They were on summer holiday or off duty. The POD had not defined how many personnel with CCG experience or competence were expected to be on duty, or available within a given time. What the POD had was a hotline, which was operated by one of the police officers in the Crisis Management Unit in the POD. Outside office hours, this person had a defined response time of two hours. This meant the police officer was expected to be present at POD within two hours when alerted about an incident on the hotline.

The POD's own evaluation of 22/7 found that "several [of the CCG-members] lacked knowledge about the crisis preparedness framework and that relatively few knew where it could be found" (Politidirektoratet, 2011a, p. 20). Furthermore, many of those who worked in the POD CCG reported that they did not perceive themselves as having been selected for CCG work prior to 22/7

(Politidirektoratet, 2011a, p. 23). Thus, the POD CCG was on 22/7 staffed with many police officers inexperienced with working in the CCG. The police officer who was the CCG Commander in the POD on 22/7 confirms that it was a chaotic situation at the POD in the initial phase, and that few of the on-duty personnel had experience with working in the CCG (POD 3).

8.2.2 Few streams of incoming verified information, few directive actions

In the minutes following the bomb explosion, the police officer operating the hotline in the POD alerts the leadership, mobilizes internal police capacities and prepares for establishing the CCG (Politidirektoratet, 2011a, p. 28). The POD is not informed by Kripos when it sends the first national alarm at 16:43 (Politidirektoratet, 2011a, p. 13), even though the POD is the one that is supposed to take the coordinating role at the national level. This corroborates the argument I made in chapter 5 that the national alarm system was a designed incapacity, a blind spot in the organizational design.

Streams of verified information from the operative level that reach the POD are few in the initial phase. In fact, the POD receives its first written status report from the Oslo police approximately two hours after the bomb explosion. It takes more than seven hours from when Nordre Buskerud police dispatches police capacities to Utøya until it sends its first written status report to the POD (Politidirektoratet, 2011a, p. 14). The lack of verified information on what is going on intensifies the sense of uncertainty within the POD.

The CCG commander and his stand-in are both on holiday. The stand-in is about one and a half hour's drive away from the POD when alerted about the bomb explosion in Oslo by a family member. He drives to Oslo and upon arrival in the POD, he decides, after consulting the police director, to establish CCG (POD 3). Thus, the CCG is established at 17:55 (NOU, 2012, p. 155).

Until 19:00, logs of what measures were taken are written on handwritten notes. Furthermore, no one ensures that someone writes minutes from the meetings at the strategic level in the POD (Politidirektoratet, 2011a, p. 29). Much of the communication with collaborating actors and the police districts is done via cell phones and private email correspondence (Politidirektoratet, 2011a, p.

30 POD SMV), rather than distributing joint messages and orders, for instance via the national alarm system.

According to the crisis preparedness guidelines, "reinforce border control" is among the key preventive measures to be implemented by the police in the event of a terrorist threat or attack (Politidirektoratet, 2011b, p. 83). Still, two hours pass after the explosion before the POD decides to reintroduce border control at the inner Schengen borders. At 17:34 the POD orders Kripos to alert all police districts about the decision, but says nothing about alerting international collaborating partners or the police leadership in adjacent countries (NOU, 2012, p. 157). Moreover, the order is sent via email to the duty manager present at Kripos. But the duty manager is presumably fully occupied and does not have time to check his personal email account. Eventually, at approximately 17:50, the POD calls the Kripos desk, informs about the sent email and what it says (Kripos, 2011, pp. 17–18). Why did the POD not just make the call in the first place? A lack of pre-existing routines on what to do appears to be a probable explanation. I am unaware of any explanations related to malfunctioning technology. Kripos effectuates the order from POD at 18:06. The following message is sent to all police districts and police agencies via the email-based national alarm system:

> The POD has, with immediate effect, decided to reintroduce border control at the inner Schengen border. It has been reported to responsible authorities in Brüssels from Kripos. It is requested that the police districts consider own operative measures according to own updated threat assessment based on this (NOU, 2012, p. 152).

This is the second email Kripos sends on 22/7 via the police national alarm system (cf. 5.1). There is reason to believe that around four of the total 27 police districts register this national alarm, i.e. actually receive the email and someone

at the Operations Center becomes aware of it. A few more police districts are informed via telephone or email sent directly to them.[91]

The POD never implements the counter-terrorism framework, nor does anyone in the top leadership in the POD or any other in the POD CCG consider implementing it (Kripos, 2011, pp. 17–18). The counter-terrorism framework lists a set of relevant measures that can be implemented in the case of a terrorist attack, such as increasing the preparedness level at the police station(s), establishing observation/control posts at central intersections, ensuring mobilization, and increasing self-protective measures at the police stations (NOU, 2012, pp. 154–155).[92] Apart from reintroducing the border control, POD takes few directive actions to enable a jointly coordinated response by the police districts. To illustrate, the first "information notice" (*informasjonsskriv*)[93] to the police districts is not distributed before 00:48 on 23 July. In the POD's own evaluation, the lack of information about what was going on in the initial phase is pointed to as a prominent reason why the first information notice was not sent earlier (Politidirektoratet, 2011a, p. 25). The POD held its first coordination meeting with other central actors on the national level at 01:00 on 23 July, which was more than nine hours after the explosion in Oslo.

To summarize thus far, the POD received little verified information on what was going on in the first hours upon the explosion. As argued in chapter 4, the POD was not designed or exercised to take a proactive coordinating role in the event of crisis. The limited crisis coordination capacity was aggravated by

[91] According to the 22 July Commission, six police districts made registrations in their PO-log about the alarm sent 18:06 about inner Schengen border control during the eve of 22/7 (NOU, 2012, p. 152). This is imprecise by the Commission. Two of the registrations do not stem from the national alarm, but from direct communication with the POD.

[92] The POD's order to reintroduce border control at the inner Schengen borders is one of the measures listed in the counter-terrorism framework, but the PODs decision was made without any reference to the framework. Hence, there is reason to believe the decision was taken without leaning on the counter-terrorism framework (cf. NOU, 2012, p. 156).

[93] Information notices are documents with information on issues such as description of current status, tasks and operations, and expectations to the police districts.

the staffing on 22/7: the most experienced CCG-members were on holiday. The consequence was that POD enacted few directive actions that could have enabled a more coordinated response by the police districts.

8.3 Proximate police districts' response

The police districts in vicinity of the Oslo police district were swiftly informed through the media that there had been an explosion in Oslo, but they received little, if any concrete orders on what to do from the national level, either from the POD, or Kripos. What to do then? Contact the Oslo police, the POD or Kripos, or await the situation and any requests or orders from the aforementioned actors? Or simply start to mobilize own police capacities? As I demonstrate in the following, the response from the police districts varied. Some did not take any measures, while others were more proactive.

The initial response by eleven police districts is examined: Asker and Bærum, Søndre Buskerud, Nordre Buskerud, Telemark, Vestfold, Vestoppland, Romerike, Follo, Hedmark, Østfold and Sør-Trøndelag. The police districts are selected for two reasons: i) their location: they could potentially assume an important role on 22/7 given their geographical location; ii) data availability: I have gained access to reliable data that documents what directive actions were taken in the initial phase of 22/7.[94] The Sør-Trøndelag police district does not meet the geography criterion, but is included because its assessments and actions taken represent an interesting contrast to some of the other police districts. To my knowledge, none of these police districts, except Follo, registered the first national alarm sent at 16:43 by Kripos.

The figure below is a map of south-, west-, east- and mid-Norway. The purple lines are the police district borders; each police district is represented with a number. The police districts referred to in this chapter are the following: Asker

[94] This sub-chapter builds primarily on the PO-log of the respective police districts and their own evaluation documented in a letter or an internal report that was sent to the police evaluators. Each police district was asked by the police evaluators to answer a set of questions. How extensively they answered differs. A main explanation is that it differed how central role they played on 22/7.

and Bærum (10), Søndre Buskerud (9), Nordre Buskerud (8), Oslo (1), Telemark (12), Vestfold (11), Vestoppland (7), Follo (3), Romerike (4), Hedmark (5), Østfold (2), and Sør-Trøndelag (20).

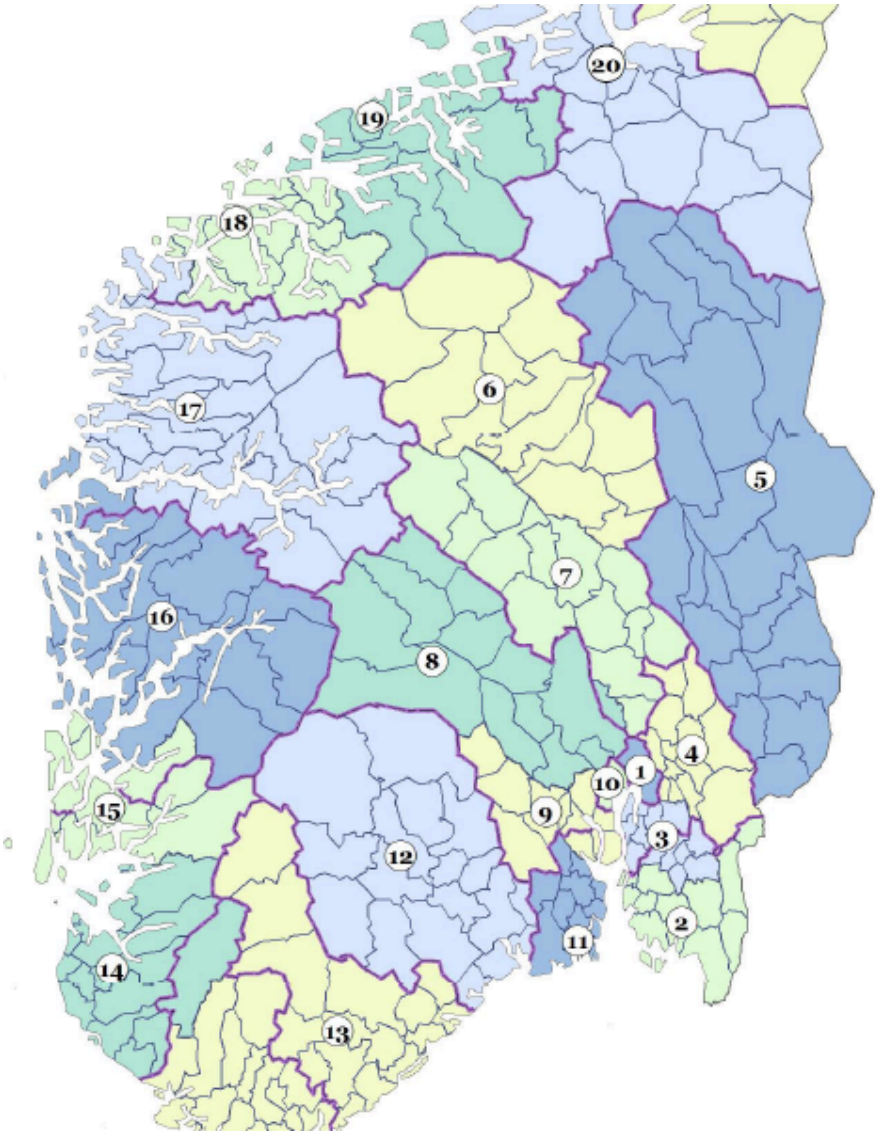

Figure 8.1: Overview of police districts in southern part of Norway.

In the following I outline how the respective police districts responded upon the bomb explosion. They are structured according to how proactive they were. The

one which was most proactive according to my conceptualization is presented first, the one who was most reactive is presented last.

8.3.1 Follo

The Follo police is adjacent to the Oslo police and is alerted about the explosion at 15:30 by civilians living at Nesodden (F 3), a peninsula about 7 kilometres south of the city center of Oslo. The Oslo OC informs the Follo police about the car-tip at 16:16 (cf. chapter 7). The Follo police establish control posts on central neighbors at 16:30. The goal is to stop potential perpetrators or accomplices. It appears that the Follo police noticed the national alarm that is sent at 16:43.[95]

At 18:00 the POD asks the Follo OC to report back how much police personnel it has available to support the Oslo police or elsewhere if needed. The OC alerts all its police personnel about the explosion in Oslo via its text message-based alarm system, and simultaneously asks the off-duty personnel that are available for duty to report back. The OC sends a status report to the POD at 20:45 informing about what capacities it can provide at what time.

In the initial phase it is unclear for the Follo police who (the POD, the Oslo police or the Nordre Buskerud police) requests assistance and what competence is needed. The Follo police are physically present with police personnel as support to the POD, and the Oslo and the Nordre Buskerud police at 04:00 on 23 July (Follo politidistrikt, 2011, p. 3).

8.3.2 Romerike

The Romerike police is adjacent to the Oslo police and becomes aware of the bomb explosion via the media. The CCG Commander and the police station chief come to the station on their own initiative. Around 16:20, the Romerike police decide to raise the preparedness level at Oslo airport Gardermoen, which is

[95] I write "appears" because there is no registration of receiving the national alarm at 16:43 in the PO-log. However, in a timeline the Follo police made while preparing its written response to the police evaluation of 22/7, it is stated that the Follo police received the national alarm about the car-tip at 16:43 (F 3). This can be interpreted in two ways: i) the Follo OC noticed the national alarm but did not register it in the PO-log, ii) the Follo OC did not notice the national alarm, but still claim it did in its report to the police evaluation.

located within its jurisdiction. By 16:50, the CCG is established (Romerike PO-log). Furthermore, Romerike mobilize local police capacities, including UEH-units and the local intelligence unit, via its unified messaging system; establish a control post at the main train station. All this is done before it is known there is a shooting situation at Utøya.

In the PO-log it is registered at 17:24 that the POD calls the Romerike police and orders it to re-establish the inner Schengen border control (Romerike politidistrikt, 2011 Romerike PO-log). This is another example of a police district that is informed about one of the national alarms through one-to-one communication with the POD rather than joint orders via the national alarm system.

8.3.3 Asker and Bærum

The main police station of the Asker and Bærum police is located 16 kilometres west of the government complex in Oslo and 24 kilometres south-east of Utøya and thus had a central location on 22/7.

A police unit from the Asker and Bærum police is on its way with a prisoner to a prison in Oslo when at around 15:45, it hears about the explosion on the police radio. Because it is currently in the Oslo police district it listens to the Oslo police radio. The police unit immediately reports what it has heard to its Operations Center (OC) (Asker og Bærum politidistrikt, 2011, p. 6).

At 16:09 the Operations Commander calls the Oslo OC to offer assistance and asks if "(…) they have information on any car or anything that is of relevance?"[96] The Oslo OC informs the Operations Commander about a van, VH 24605, driving in the wrong direction in a one-way street (cf. chapter 7). It is the impression of the Operations Commander that the Oslo police do not need assistance from the Asker and Bærum police for the moment. Still, the Operations Commander considers it likely that a request for assistance from the Oslo police will come at a later point, and therefore enacts measures to get an overview of what police capacities are available in the police district. Two members of the CCG are mobilized to effectuate this work. The POD calls the

[96] The Oslo police, transcript of phone communication, 16:08:46-16:10:57.

Asker and Bærum OC around 17:10 and asks what capacities they can mobilize on short notice to assist in Oslo. 25 minutes later, at 17:35, the OC reports back to POD that they can mobilize 8–10 police officers on relatively short notice (Asker og Bærum politidistrikt, 2011, pp. 32–33).

At 17:45, the Asker and Bærum OC receive a call from the Nordre Buskerud OC, which informs that there is a shooting situation at Utøya, shots fired with automatic weapons and some are lying on the ground. The Asker and Bærum Operations Commander asks "What do you need?". The Commander does not get a clear answer, but is requested to send out police units and maybe check cars leaving the incident scene.[97] At this point the Asker and Bærum police unit has one police unit available, i.e. that is not currently on a mission. The OC receives several emergency calls from relatives of youths at Utøya. The OC tries to call the Nordre Buskerud OC to get more information, but it takes several hours before the OCs of the Nordre Buskerud and Asker and Bærum police have a second phone conversation.

At this point the OC was under the impression that several had been shot at Utøya, but in the words of the internal evaluation "(…) was by no means aware of the magnitude of the incident" (Asker og Bærum politidistrikt, 2011, p. 33). The OC tell one police unit to establish an observation post on the neighbor where traffic from Utøya is likely to pass. Why did not the OC immediately dispatch police units to Utøya? In the internal evaluation, the explanation that is given is that the OC was unable to establish "sufficient dialogue" with the Nordre Buskerud OC (Asker og Bærum politidistrikt, 2011, p. 36). I return to this response by the Asker and Bærum OC in the discussion section on police operation in Utøya in chapter 9.

8.3.4 Vestfold

The Vestfold police is not adjacent to either the Nordre Buskerud or the Oslo police districts, but its main police station is located approximately 100 kilometres from both incident scenes. When the Vestfold OC becomes aware of

[97] The Nordre Buskerud police, transcript of phone communication, 17:45:18–17:46:35.

the explosion in Oslo it takes immediate directive action to mobilize more police personnel, including its UEH-unit. Fifty minutes after the bomb explosion, the Operations Commander call the Oslo OC to inform that Vestfold has mobilized its UEH-unit and is ready to assist if/when necessary (cf. chapter 7).

The Vestfold OC receives its first emergency calls from relatives of youths at Utøya around 17:35. After unsuccessful attempts to reach the Nordre Buskerud police, the Vestfold OC call the Søndre Buskerud OC to inform that they have mobilized police capacities and can assist if/when necessary (Vestfold PO-log). The mobilized UEH-unit is relocated further north in the police district to be closer to the Søndre Buskerud police in case it needs assistance and because the Søndre Buskerud police has reduced capacity as it has dispatched three police units to assist the Nordre Buskerud police (Vestfold politidistrikt, 2011, p. 2).

The second national alarm, about re-establishing inner Schengen border control, which Kripos distributes at 18:06 upon orders from the POD, is registered at 17:54 in the Vestfold police PO-log. This seems contradictory at first glimpse. However, as described in the previous sub-chapter, the POD had one-to-one communication with several of the police districts, and the decision to re-establish the inner Schengen border control was taken around 17:30. Thus, a probable explanation is that someone in POD called or emailed the Vestfold OC about the order at some point after 17:30 and before 17:54.

8.3.5 Hedmark

The Hedmark and Østfold police districts are the two police districts in southeast Norway that border on Sweden. Around 16:00 the operators at Hedmark notice news on text-TV about an explosion in Oslo. The OC informs the commissioner and the on-duty operative personnel about the incident in Oslo (Hedmark politidistrikt, 2011, p. 2), and the Customs service at a central border crossing is ordered to turn their cameras in the opposite direction so they face towards Norway (Hedmark PO-log). This is done to monitor the traffic departing from Norway. The CCG commander is alerted at 16:55, and the CCG mobilized and established by 19:15 (Hedmark PO-log). Twenty minutes earlier the commissioner orders border control at Eda, a crossing between Norway and

Sweden (Hedmark PO-log).[98] Around the same time, the Hedmark police are informed via a police officer from the Traffic Police Agency that Kripos has issued a national alarm informing about a car with registration number VH 24605 (Hedmark PO-log).[99] In the following minutes, the operators at the OC call the operative police units in the police district and inform them about the car.

On several occasions during 22/7 the CCG discusses whether it should initiate contact with the POD or the Oslo police to get more information, as it thus far has received no information. The discussions never result in any attempts to establish contact (Hedmark politidistrikt, 2011, p. 2).

The first time the Hedmark police and the Oslo police have contact is at 19:44, when the latter informs the former that one man has been arrested at the shooting at Utøya and that this person supposedly is a resident in Hedmark. In the subsequent hours they plan and coordinate a police operation at the residence in Hedmark belonging to the person arrested (Hedmark politidistrikt, 2011, pp. 3–4). This operation is not described any further here as it falls outside the scope of this thesis.

8.3.6 Sør-Trøndelag

Sør-Trøndelag police district is located 400-500 kilometres north of Oslo and does therefore not fulfil the location criterion for being selected. The police district is nevertheless included because it, in contrast to several of the police districts in proximity to Oslo, enacted proactive actions upon the explosion in Oslo. It should also be mentioned that it may be that other police districts distant from Oslo also enacted proactive actions, but I have not examined further police districts. The main reason for this is limitations in data availability.

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[98] In Hedmark's own evaluation report it is reported that "in an early phase ordered and established an adjusted border control with one armed police unit at Highway 2 close to the border to Sweden at Magnormoen" (Hedmark politidistrikt, 2011, p. 3). What is meant by "early phase" is not further specified. There is reason to believe the reference point is the same as the border control at Eda registered in the PO-log, because Eda is located on the Swedish side of the border of Highway 2 adjacent to Magnormoen.

[99] This latter information is puzzling because the alarm that was sent from Kripos did not include the letters 'VH', cf. previous chapter. My data material does not give any clear indication of what the possible explanation of this may be.

It is alerted at 16:43 about the incident in Oslo via one of its own police officers who had been contacted by his wife who was in Oslo. The commissioner is alerted, and it is decided to establish CCG. Around 18:30, the CCG start examining what capacities are available if needed, either in own police district or upon a request from the Oslo police, which the Sør-Trøndelag police expect it will receive. Two hours later it is concluded Sør-Trøndelag has around 40 police officers available for action (Sør-Trøndelag politidistrikt, 2011).

8.3.7 Telemark

Telemark police district is located south-west of Oslo but is not adjacent to the Oslo police district. Its main police station is located in Skien, approximately 130 kilometres from Oslo by car.

The Telemark police are alerted about the bomb explosion via the media coverage. No local measures are implemented in response to the bomb explosion. At 17:29 the Telemark police are alerted about the shooting at Utøya by a relative of someone who is at Utøya. During the next twenty minutes the Telemark OC informs the OCs in the Nordre Buskerud and Oslo police respectively about the reports it has received. Moreover, the commissioner, assisting commissioner and leader of the local UEH-unit, who all are off duty, are oriented about the incident by the Operation Center. The leader of the UEH-unit informs he can have eight UEH-officers ready if needed (Telemark, PO-log).

At 19:40, the Telemark OC is informed by the Nordre Buskerud OC that one perpetrator has been arrested at Utøya, that there are two more active cells that allegedly will strike this evening/night, and that more information about this will be distributed by Kripos (Telemark PO-log). Thirty minutes pass without the Telemark police receiving any national alarms or other written information from Kripos. The Operations Commander therefore calls Kripos and requests instructions from the national level. During this conversation, it becomes clear to the Operations Commander that Kripos has already distributed three emails via the national alarm system. The emails have however been distributed to an old email address, which is assumed to be the reason why the emails have not been registered by the Telemark OC (Telemark politidistrikt, 2011, p. 1).

Based on the information received from the Nordre Buskerud police, the Telemark OC decides to reinforce the number of operative personnel in the police district. In addition, four UEH-officers are mobilized (Telemark PO-log). It is also considered to offer UEH-units to the Nordre Buskerud police to assist in the on-going police operation. However, the OC decides instead to await a formal request for assistance from the Nordre Buskerud police (Telemark politidistrikt, 2011, p. 2).

8.3.8 Østfold

The Østfold police becomes aware of the bomb explosion via the media (NOU, 2012, p. 158). The OC receive hardly any information from the Oslo police, the Nordre Buskerud police or the national level in the first hours after the explosion. The commissioner, the intelligence service and the CCG Commander is alerted at 18:18 and 18:46 respectively (Østfold politidistrikt, 2011, p. 1). The local intelligence unit has no new information to give on the issue.

At 17:56, one of the operators receives a private email, i.e. addressed to the operator, from the POD about re-establishing the inner Schengen border control. There is however no information on why. Again, we see that the POD is informing via one-to-one communication to one specific person in the police district, which is a precarious way of communicating because it is dependent on the attention (and presence, for that matter) of one person.

The Østfold police do not register the three national alarms that Kripos sends when they are sent. However, from around 21:00 and onwards several messages "pop up" on the computer screens of the operators, including the national alarm Kripos had distributed at 16:43 about an armed man in uniform and a van (Østfold politidistrikt, 2011, p. 1).

The Swedish coastal service reports to the Østfold police at 18:34 that it is ready to assist if necessary. The CCG is mobilized by 19:23 (Østfold PO-log). At 20:52 the Swedish police inform the OC that it is checking traffic from Norway to Sweden on the main neighbor in the police district. This is done because a national alarm has been distributed within the Swedish police and it is on the lookout for a gray van. In other words, the information about a gray van

has reached the Swedish police before it reaches Østfold (and many other) police districts in Norway.

Østfold implements its own border control at Moss airport Rygge and at border connections around 21:00 (NOU, 2012, p. 158). At 00:07 on 23 July, the Østfold CCG receives the first order from the POD to mobilize and dispatch police personnel to assist in the on-going police operations. Nine hours later Østfold also receive requests for assistance from Kripos (forensics) and the Oslo police (Østfold politidistrikt, 2011, p. 2).

8.3.9 Søndre Buskerud

The Søndre Buskerud police is adjacent to the Nordre Buskerud police, and like the main police station of Asker and Bærum police, the main police station of the Søndre Buskerud police is also located relatively close to both incident scenes, 40 kilometres west of the government complex and 44 kilometres south of Utøya.

The Operations Commander initiate no mobilizing measures in his own police district upon the explosion in Oslo, nor does he inform the CCG Commander or the commissioner about the incident in Oslo (Søndre Buskerud Politidistrikt, 2011, p. 15). At one point one of the operators asks the Operations Commander if they should do anything regarding Oslo. The Operations Commander responds that they will wait until they receive any request for assistance from the Oslo police (SB 1).

The Søndre Buskerud police is one of the three police districts that first receive emergency calls from Utøya. The Operations Commander takes immediate action, reorganizes its operative police units and dispatches three police units to Hønefoss where the main police station in the Nordre Buskerud police is located. The subsequent parts of the response by the Søndre Buskerud police is examined and discussed in chapter 9.

8.3.10 Nordre Buskerud

The main police station in Nordre Buskerud police district is located in Hønefoss, which is about 60 kilometres north of Oslo. The operations commander and the operative personnel are informed about the explosion in

Oslo via the television news (NB 10). They follow the developments in Oslo via the television. At one point a civilian calls the OC asking for advice on the most appropriate way to drive into Oslo, given the explosion. The Operations Commander calls the Oslo police to find out. When talking to the Oslo OC, she also asks if there is anything the Nordre Buskerud police can do to assist. The response she gets is negative, no assistance is needed (NB 10). Two of the police officers at the strategic level discuss on the phone at one point their low level of staffing and the possibility of a potential request for assistance from the Oslo police. One of them calls the Incident Commander at 17:22 and asks if they have received any request for assistance from the Oslo police (NB 3). Three minutes later, the Nordre Buskerud OC receives the first emergency call from Utøya about shots being fired on the island. The OC dispatch all available police units and starts mobilizing more police capacities, which I return to in chapter 9.

8.3.11 Vestoppland

The Vestoppland police is adjacent to the Nordre Buskerud police, but not to the Oslo police. The media coverage of the explosion in Oslo makes the Vestoppland police aware of the incident in Oslo. No local measures are implemented. The first reports of shooting at Utøya come via emergency calls from relatives of youths present at Utøya. At 17:44 the OC gets in contact with the Operations Commander at the Nordre Buskerud police and informs about receiving an emergency call from a relative of youths at Utøya. There is no further exchange of information or questions asked.[100] The CCG is not established, but the leaders of the respective police stations in the police district are alerted about the situation (Vestoppland politidistrikt, 2011). The OC struggles to reconnect with the Nordre Buskerud OC. The primary sources of information in the first hours are media and the emergency calls from relatives of youths at Utøya.

No mobilizing measures are initiated by the OC during the evening of 22/7. The Nordre Buskerud police request assistance from the Vestoppland police at 01:40 on 23 July, Operative police personnel are alerted via text message and by 03:30 eleven police officers have been mobilized and are ready

[100] The Nordre Buskerud police, transcript of phone communication, 17:44:24.

to assist the Nordre Buskerud police (Vestoppland politidistrikt, 2011, p. 2). Could the Vestland police have been more proactive? One of those in command on 22/7, interviewed by the author, asserts that it could have been possible. At the same time, a main challenge was that they did not have contact with the Nordre Buskerud police and therefore had scarce information on what was going on. He further asserts that it took some time before they fully understood the magnitude of the incident and the reports they received from relatives of youths at Utøya (V 1).

8.4 Discussion

Thus far I have outlined how the POD and eleven police districts were informed about the bomb explosion in Oslo and what directive actions they took, if any, in the subsequent hours. In the next section I make some general observations about the response by the eleven police districts. Then I discuss who was expected to coordinate the mobilization and who de facto did it. In the final section, I employ the multiple streams framework to explain the reactive response by the POD and the mixed response by the police districts.

8.4.1 Eleven police districts, eleven responses

I will highlight four general points from the descriptive analysis of the eleven police districts' response to the reports of an explosion in Oslo, and subsequently the reports of shooting at Utøya. First, the police districts were informed about the bomb explosion via media or via own police officers who themselves had been alerted via a third party, for example relatives or colleagues in Oslo. Thus, none of the police districts received its first alert about the explosion from the Oslo police, or the POD or Kripos at the national level.

Second, it differed between the police districts what measures were implemented, if any, and when these measures were implemented. Table 8.1 yields a simple summary of how the police districts responded upon the bomb

explosion in Oslo.[101] Six of the OCs in the eleven police districts examined in this chapter took directive action to mobilize capacities and/or implement one or more control measures upon the explosion understood as actions taken upon the bomb explosion and before the police started receiving reports of shooting at Utøya. The other five OCs did not take any directive actions in this time period. They awaited the situation.

Table 8.1: Summary of police districts response to the bomb explosion.

Police district	Reaction, first attack	Actions taken
Follo (3)	Proactive	Reinforced the intermediate level and established control posts on central freeways
Romerike (4)	Proactive	Reinforced both the operative and intermediate level, several control measures.
Asker and Bærum (10)	Proactive	Reinforced the intermediate level
Vestfold (11)	Proactive	Reinforced the operative level
Sør-Trøndelag (20)	Proactive	Reinforced the intermediate level.
Hedmark (5)	Reactive	Cameras at central border crossing turned in opposite direction.
Telemark (12)	Reactive	None
Østfold (2)	Reactive	None
Nordre Buskerud (9)	Reactive	None
Søndre Buskerud (8)	Reactive	None
Vestoppland (7)	Reactive	None

One simple, but important conclusion, that can be derived from table 8.1 is that across the police districts, there existed various preconceptions about *when* it was time to mobilize and *what* capacities to mobilize.

[101] A more extensive summary is included as an appendix. The numbers in the parentheses in the table correspond to the police districts numbers on the map in figure 8.1.

Third, some of the police districts received orders or requests from the POD, but this happened on a one-to-one communication (and sometimes by chance) rather than joint orders via the email-based national alarm system. The one order that the POD did send via the email-based alarm system was only registered by a few police districts (see also chapter 5).

Fourth, there is not a strong relationship between the distance from Oslo and the level of mobilizing. The Sør-Trøndelag police, which is located 400–500 kilometres from Oslo, established CCG early on. By contrast, neither the Søndre Buskerud nor the Nordre Buskerud police, whose main police stations are located approximately 40 and 50 kilometres respectively from Oslo, implemented any measures prior to when the reports of shooting at Utøya started pouring in.

8.4.2 Who coordinates the mobilization?

In chapter 6, I showed that the Oslo CCG expected that the POD would coordinate the mobilization of police capacities from other police districts. The subsequent hours revealed however that it was unclear for many of the police districts and national police agencies who coordinated the mobilization of additional police capacities on behalf of the Oslo police and the Nordre Buskerud police – whether it was the Oslo and the Nordre Buskerud police respectively or the POD (Sønderland, 2012, pp. 68–69). Why did the POD not take a more proactive role, why were many of the proximate police districts reactive, in terms of taking directive action to coordinate the mobilization of police capacities? Furthermore, why did few police districts implement measures to increase the crisis preparedness level in their own police district after the bomb explosion in Oslo? I emphasize five factors of relevance concerning the confusion regarding these questions that emerged after the bomb explosion.[102]

First, I would argue that there existed ambiguities and voids embedded in the organizational design, both concerning the role of the POD and proximate police districts when extraordinary incidents occur. Regarding the role of the

[102] The possible answers to the questions are also interdependent on inter-organizational factors between the affected police district (the Oslo police) and the others, which I discussed in chapter 6.

POD, it *can* give "operations orders to the operative level", and it *can* give "advice to the affected commissioners and chiefs of police agencies, and make sure that personnel and material capacities are deployable". This is all according to police crisis preparedness guidelines (Politidirektoratet, 2007, p. 16).

The guidelines for the national alarm system stated that national alarms are "effectuated by Kripos upon request by police district or police agency", while "the POD effectuates preparedness measures" (Politidirektoratet, 2010b, p. 3). What was meant by "preparedness measures" was not elaborated or exemplified. In the revised crisis preparedness guidelines of 2011, the concept "preparedness measures" (*beredskapstiltak*) is not mentioned. Furthermore, the POD was not included as a recipient in the national alarm system, thus when national alarms were distributed, the POD did not automatically receive these. It was dependent on Kripos taking contact, which Kripos did not do when the first national alarm was sent on 22/7.

Outside office hours, the unit at the POD expected to take the lead within POD in the event of extraordinary incidents consisted of a cell phone operated by one police officer with a two-hour response time. Seeing these factors in combination indicates an organizational design that is ambiguous about whether the POD should take an operative role in the initial phase of crises, and if so, what tasks such a role would entail.

Turning to the role of the proximate police districts, the crisis preparedness guidelines prescribe that the affected police district(s) can request "neighbor assistance", if they need more capacities or specialized competence to handle an incident (Politidirektoratet, 2011b, p. 40). However, one condition is that "a joint agreement on expenses must be made between the police districts" (ibid), and the responsibilities for transport, duty shifts and accommodation among other things must be clarified. The guidelines say nothing however on what "neighbor assistance" would imply in the event of extraordinary incidents characterized by urgency (thus no time for making agreements on expenses) such as crises. This void in the guidelines indicates that urgent "neighbor assistance", and clarifying what it would mean in practical terms, has not been a key concern for the POD.

Second, there is reason to believe the ambiguities and voids in the organizational design rarely have been high on the agenda due to the fact that there were few, if any, real incidents in the years prior to 22/7 that demanded swift crisis coordination across police districts and between the national and local level. Moreover, exercises and training on inter-organizational crisis coordination was scarce. A change in the positive direction came in 2007, when the POD started conducting annual full-scale exercises where inter-organizational coordination across the national and local level was a central issue. As these exercises were conducted in one police district, inter-organizational crisis coordination between police districts was not exercised. Moreover, as only one police district was actively involved in the annual full-scale exercises it would take 27 years before all police districts had been an active participant in this type of exercise. The annual full-scale exercise was too little, too late. Moreover, according to the police officer in the POD responsible for organizing the full-scale exercises in their first years, they were good at conducting the exercises, "but the POD and the police districts were not good enough at looking at what they could improve based on the experiences from the exercises" (POD 5).

Third, the national alarm system did not work effectively on 22/7. Few police districts registered any of the three national alarms Kripos distributed in the time span 16:43–18:50 (cf. chapter 5). It is possible that if the police districts had received these alarms, they would have been more prone to increase their level of crisis preparedness and mobilized more police capacities.

Fourth, the alerts and requests for assistance from POD, Kripos, the Oslo and Nordre Buskerud police were distributed via multiple communication channels, which aggravated the challenge of receiving and coordinating these requests for the proximate police districts. As one police district pinpoints in its report to the internal evaluation of 22/7, the alerts and requests it received were sent via five different channels: the national alarm system, two different email-addresses, phone and classified emails via the Intelligence Services' web (Follo politidistrikt, 2011, p. 1).

Fifth, the channels normally used for inter-organizational communication were often unavailable at the Oslo police and the POD. Thus, proximate police districts seeking information and offering assistance had severe problems establishing contact with those in command in the POD and in the Oslo police. It seems the police districts did not have a plan B for how to communicate when the usual channels were occupied or unavailable. Moreover, once the CCG was established in the Oslo police, it was hard for other police districts to get in contact with the respective CCG functions because these did not have permanent phone numbers that were known in advance (Follo politidistrikt, 2011, p. 4). Thus, the police districts had to first establish contact and subsequently try and retrieve the phone number to the police officer currently holding the CCG function they were seeking.

8.4.3 Taking a streams approach

In the following, I discuss how to understand and explain the initial response by the POD and police districts proximate to the Oslo police after the bomb explosion in the government complex in Oslo by utilizing the multiple streams framework developed in chapter 2.

Non-couplings and unavailable channels for information sharing

Few police districts were coupled with the information streams originating from the national level (Kripos) distributed via the police's internal alarm system. Therefore, most police districts remained for a long time unaware that the POD had decided to reintroduce border control at the inner Schengen border, and that they entertained the risk that there were two more terrorist cells.

It was also hard for the police districts to actively seek relevant information. The PO-log of the Oslo police could in practice not be accessed by the other police districts. None of the information decoded and registered in the Oslo police's PO-log was thus available for police officers outside the Oslo police. Moreover, getting through to those in command in the Oslo police remained difficult for a long time. One reason is that those in command were busy coordinating the on-going operations and the queue of pending tasks was long. However, another reason is that they lacked pre-existing structures for

direct inter-organizational communication and information sharing when a police district affected by a crisis had established its CCG.

Enacting mobilization: routinized or improvised response?

The POD responded reactively while the response by the police districts differed, some responded reactively, others proactively. But what were the respective responses instances of? Were they instances of routinized or improvised actions (cf. the analytical framework in 2.3.5)?

I conceptualize the response by the POD as adaptive improvisation. Some may question this conceptualization by arguing that the response by the POD was inadequate and can therefore not be conceptualized as improvisation. The implicit argument is that improvisation almost by definition leads to a positive outcome and because the POD's response did not lead to a positive outcome, it cannot be conceptualized as improvisation. Although such a preconception of improvisation is common in existing research on improvisation (cf. Frykmer et al., 2018), in part because of a selection bias towards successful cases, I contend it has little to offer for analytical purposes because it provides a (too) simple conceptualization of the phenomenon. In this thesis improvisation is perceived as reworking and drawing on pre-existing materials, design and capacities. The challenge for the on-duty police officers in POD on 22/7 was that they had limited relevant pre-existing materials, design and practices to draw on. The POD had some formal procedures on what the CCG, and the POD more generally, was expected to do in extraordinary settings, but these had rarely been practiced and had thus not manifested themselves as institutionalized practices in the organization. The on-duty police officers tried their best to draw on and rework the pre-existing materials, design and practices they had knowledge of. Some called some of the police districts, some emailed the police districts, some took notes on what was being done with what they had at hand – pen and paper. They tried to adapt and improvise, to adapt the existing structures and practices to the setting they were in.

I conceptualize the response by the police districts that responded proactively as adaptive improvisation. They were confronted with an unprecedented crisis setting, and their assessment was that existing structures

and practices needed adjustments to be effective. They chose to mobilize police capacities even though they had received no requests from the POD or the Oslo police.

Turning to the reactive police districts I conceptualize their response as routinized actions because a pre-existing norm was that the police districts handled all incidents within own jurisdiction, including crises. If the affected police district(s) needed assistance it was expected to request assistance, or the POD would coordinate the mobilization of external police capacities. Neither of these two things happened after the bomb explosion. The Oslo police did not request assistance, and even responded negatively to those police districts that offered it. The POD contacted some police districts and asked them to respond to let them know what capacities they could have available at what time, but the POD sent no joint orders to all police districts except for the order to re-establish the inner Schengen border control.

At the same time, the duty to act is clear: every police officer has an individual obligation to take action when civilian lives are in danger. But what to do in situations where another police district is affected, you have received no requests for assistance, and you have little information on what has happened? This was the case on 22/7 and posed an inter-organizational coordination challenge that was new for the POD and the police districts. By "new" I do not claim that such a scenario had never happened or never been discussed among some police officers at some point in time. I assert that such a scenario had not been experienced or discussed to the extent that there was a shared awareness at the organizational level of this type of challenge among the leaders and those with command in the police districts and the POD. The pre-existing practice was that crises were handled by the police district(s) that was affected, and if it needed assistance, it would request assistance. This subject matter is further discussed in chapter 9 related to the inter-organizational crisis coordination of police capacities towards Utøya.

8.5 Conclusion

In this chapter I have argued that the POD was not designed, exercised or staffed to take a proactive coordinating role on 22/7. Combined with the fact that the POD had little information on what was going on, it consequently enacted few directive actions to ensure mobilization in the police districts. Given its limited capacity, it is debatable whether the POD would have taken a more proactive role had it received more verified information on what was going on in the first hours upon the explosion.

Turning to the police districts and the differences in their response, I have argued that the mixed response was a consequence of the lack of joint orders from the national level. There was a lack of directive actions by the POD, and few police districts were coupled with the alarms distributed by Kripos via the national alarm system. Moreover, it was difficult for the police districts to obtain relevant information, because the relevant CCG functions in the Oslo police and the POD were hard to reach. In sum there were hardly any directives from the national level, which gave too much leeway for idiosyncratic responses by the police districts.

9 Coordinating Police Capacities towards Utøya

"The caller said there was someone there shooting. Then I thought – we have had a bomb here – that someone is shooting at Utøya is something they [Nordre Buskerud police] have to handle."

Operator in the Oslo police, interviewed by author.

"I do not mean to speculate, but what if it is ONE insane person that first sets off a bomb, and then travels to Utøya..?"

Tweet by civilian at 18:36, 22.07.11.

"Where is that goddamn red phone, the hotline service that ensures communication between the police districts? It does not exist, and it was missed"

Operations Commander in Søndre Buskerud police, interviewed by internal evaluators.

9.1 Introduction

At 17:25, about two hours after the bomb explosion in Oslo, the Nordre Buskerud police are connected to an emergency call from a civilian at Utøya who reports that shots have been fired at Utøya. The island Utøya is located 40 kilometres north-west of Oslo. In the subsequent minutes, many police districts receive emergency calls about shooting at Utøya. When the shootings at Utøya start, 22/7 changes from being a singular crisis to a sequential crisis. There is now an on-going shooting incident, which potentially is related to the explosion in Oslo.[103] Hence, swift mobilization is of utmost importance. Nordre Buskerud, Søndre Buskerud and Oslo police district respond immediately when they receive their first emergency calls about shooting at Utøya. In contrast, the police districts Asker and Bærum and Vestoppland, that are also adjacent to the Nordre Buskerud police district, await the situation, Vestoppland does not dispatch any capacities to Utøya on the evening of 22/7. The Oslo police dispatch seven units from the national anti-terrorism police (Delta) to Utøya: there is allegedly no helicopter available, so the Delta-units have to go by car. Søndre Buskerud police dispatch three police units, but they are directed to the police station in the Nordre Buskerud police district, which is another direction than where Utøya is.

Thirty-five minutes pass before the Nordre Buskerud police take measures to mobilize more boats in addition to their own police boat registered for ten persons. The meeting point for police units arriving from other police districts, is changed to a location that is approximately three kilometres further away from Utøya. While the first police unit that arrives at the Utøya mainland await and observe the island, local residents and camping tourists organize a spontaneous rescue operation to rescue youths who are swimming for their lives away from the island.

Why did some of the adjacent police districts await the situation and why did Søndre Buskerud police dispatch its units to the local police station instead of Utøya? Why was the meeting point for arriving police units changed? Why

[103] In the interviews I have collected, it varies whether the interviewees immediately assumed there was a link between the two incidents. Some did, while others did not.

were the Nordre Buskerud police not more proactive in mobilizing more boats? Why was helicopter transport unavailable for Delta, and why did the first police unit that arrived not do more than observe towards the island?

I argue that although it differed how proactive the Operations Centers in the aforementioned police districts were to mobilize and dispatch capacities, all the directive actions can be conceptualized as routinized actions. One important explanation is what information they were coupled with, when. Furthermore, the main coordination challenges were related to inter-organizational coordination (rather than intra-organizational).

The chapter is much longer than the other empirical chapters (totalling sixty pages). The main reason is that the police operation Utøya was against a moving target and several police districts were actively involved from early on. Furthermore, the shooting was happening on an island in a rural area, in contrast to the bomb explosion, which happened in the center of the capital. Thus, from a crisis coordination perspective, the police operation was more challenging because it involved more elements of coordination: coupling capacities from different police districts, mobilizing boat capacities and air transport capacities. Below is a simple timeline of police operation Utøya

Timeline of police operation Utøya

17:25–26 Utøya, Søndre Buskerud and Oslo police receive, independently of each other, their first emergency call from Utøya. All three mobilize.

17:40 The Nordre Buskerud police request assistance from Delta.

17:52 First police unit arrives Utøya pier mainland.

17:57 The Nordre Buskerud police unit with the police boat arrives at the location from where they launch the boat.
First contact between the Nordre Buskerud police and Delta.

17:58 Meeting point for arriving police is changed to Storøya, which is located three kilometres further north from the island.

18:07 Delta unit D-34 arrives as first police unit at the new meeting point, Storøya.

18:15 The police boat departs from Storøya with eleven police officers in armor and heavy equipment. The boat is registered for ten.

18:19 The police boat halts. A civilian boat comes to rescue within approximately 30 seconds. It is registered for five persons, but ten police officers enter the civilian boat.

18:24 Another civilian boat arrives, and the police officers regroup themselves in the two boats.

18:27 The first police unit to arrive at Utøya.

18:36 The police on the island report on the police radio one perpetrator has been arrested.

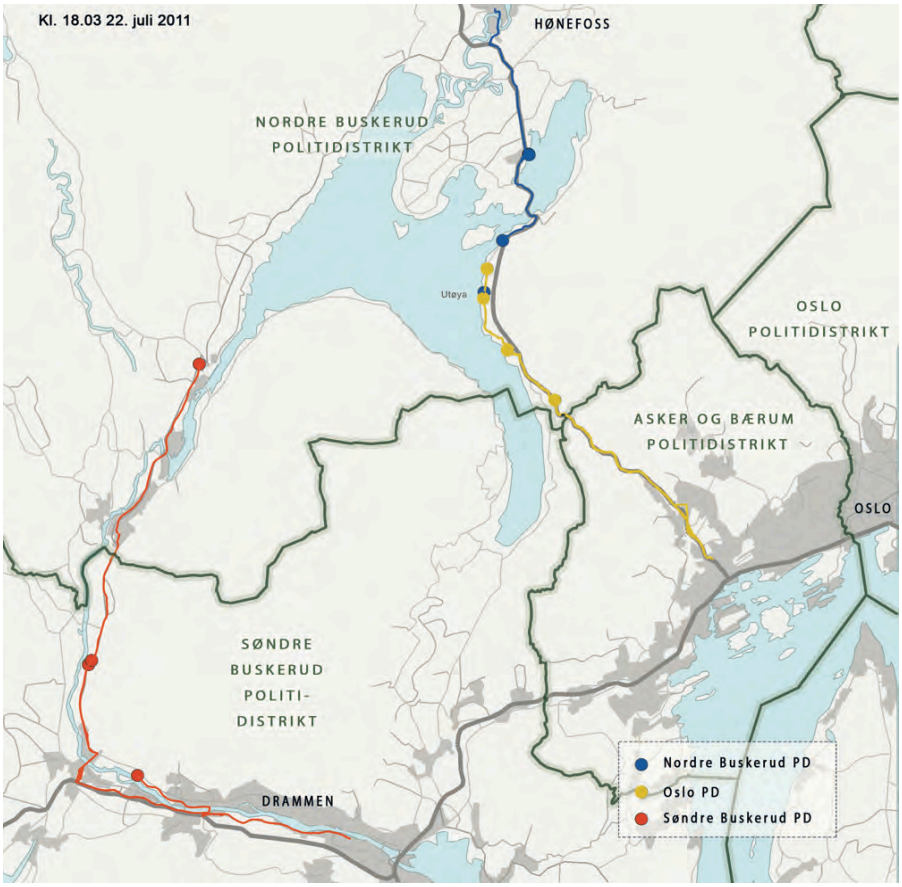

Figure 9.1: Overview of the location of the dispatched police units at 18:03.[104]

[104] The illustration is taken from the report of the 22 July Commission (NOU, 2012, p. 118).

Figure 9.1 is a snapshot of police operation Utøya at 18:03. The green line indicate the police district borders. The area in the upper right corner without a name on is part of Vestoppland police district. The coloured dots are police cars and the coloured lines depict their route. The Nordre Buskerud police units (in blue) dispatched from its main police station in Hønefoss (on top of the map). The Søndre Buskerud police units dispatched from two locations, one of them was their main police station in Drammen (on the bottom of the map). The Delta units (in yellow) were dispatched from Oslo (on the right side of the map), the yellow lines on the figure are thus incomplete. Utøya is located where the unreadable text on the lake is.

The remainder of this chapter is divided into three main parts. Three of the points in the timeline are put in red to pinpoint that they structure the disposition of the first part of the analysis (9.2-9.5), which focuses on the time span 17.25–18.36. 9.2. and 9.3 focuses on the initial response by the Nordre Buskerud police and the Oslo police/Delta respectively, until 17:57 when the Nordre Buskerud police and Delta have direct contact for the first time, cf. the second red line in the timeline. Then, in 9.4 I examine the coordination between the Nordre Buskerud police and Delta from when they first establish contact at 17:57 and until 18:36 when one perpetrator is reported arrested via the police radio. In 9.5 I examine the response by the Søndre Buskerud police from when they are alerted at 17:25 and until the dispatched police unit arrives at the meeting point for the police around 19:00. The response by the Søndre Buskerud police is examined separately, because it did not become an active part of the police operation Utøya, which I focus on in this chapter. Each sub-chapter in the first part starts with a timeline that summarizes the main events that are covered in that sub-chapter. Moreover, in the first part of the empirical analysis I map the actual crisis coordination processes in detail.

In the second part of the chapter (9.6-9.7) I briefly examine and discuss two other parts of the police operation:, how the local Fire and Rescue services (FRS) was mobilized (9.6), and two instances of self-organization, two local police officers and the spontaneous rescue operation by civilians that emerged

while the police were dispatching and coordinating their capacities towards Utøya (9.7). The FRS is included because they disposed a search and rescue boat, which potentially could have played a crucial role in the police operation. The two instances of self-organization are included because they are an important part of the overall story and because they function as interesting reference points for the broader discussion.

This brings me to the third and final part of this chapter where I discuss the overall findings (9.8) and conclude (9.9).

9.2 Crisis coordination by the Nordre Buskerud police 17:25-17:57

This sub-chapter examines the response by the Nordre Buskerud police from when it received the first emergency call at 17:25 until the Nordre Buskerud police and Delta have direct contact for the first time at 17:57. Below is a timeline of the main events covered in this sub-chapter.

Timeline of the Nordre Buskerud police response 17:25–17:57[105]

17:25 Receives first emergency call from Utøya.

17:38 First police unit (P1) leaves the police station.

17:40 Nordre Buskerud OC requests assistance from Delta.

17:45 Change of command at the OC.

17:48 Second police unit (P2), with the police boat, leaves the police station.

17:52 P1 arrives Utøya pier mainland.

17:53 Third police unit (P3) leaves the police station.

17:57 P2 arrives at the location from where they launch the boat.

[105] The timeline is based on information gathered from the Nordre Buskerud police evaluation (Nordre Buskerud Politidistrikt, 2011, pp. 35–41) and the 22 July Commission (NOU, 2012, pp. 114–116).

9.2.1 Status in Nordre Buskerud police district at 17:25

The Nordre Buskerud police district is divided into three regions. Utøya is located in the lower region. On the afternoon of 22 July 2011, the Nordre Buskerud police in the lower region is staffed with the Operations Commander and five police officers. The Operations Center (OC) is staffed with no one else but the Operations Commander. As demonstrated in chapter 4, single-staffed OCs were quite common in periods of the week in several police districts, including the Nordre Buskerud police district.

The table below lists all police officers from Nordre Buskerud police district directly involved in the first part of the police operation directed at handling the shooting situation at Utøya, which is the focus of this chapter.

Table 9.1: Overview of police personnel involved in the police operatio

Individual	Role in police operation	At station 17:25?
Operations Commander	At OC	Yes
Criminal investigator / operator	At OC	Yes
P1a	In first police car (P1)	Yes
P1b	In first police car (P1)	Yes
Incident Commander / P2a	In second police car (P2) with the police boat	Yes
P2B/ Task Force Commander[106]	In second police car (P2) with the police boat	No
P3a	In third police car (P3)	No
P3b	In third police car (P3)	Yes
P3c	In third police car (P3)	Yes (off-duty)
P4 / Incident Commander* Utøya	In fourth police car (P4)	No
Operations Commander (new)	At OC (from ca. 17:46)	No

*P4 replaces P2a as Incident Commander when he joins the police operation.

[106] In the event of larger incidents, the Incident Commander can appoint and delegate responsibilities to experienced police officers. These are called Task Force Commanders and will have the command of the task responsibility delegated to them by the Incident Commander.

9.2.2 17:25–17:48 information-coupling, directive actions and coordination

All six police officers on duty, and one police officer off-duty, are present at the police station at 17:25 when the Operations Commander is connected to an on-going emergency call between a civilian and an operator at the AMK-center[107]. During the approximate 90 seconds before they are disconnected, the caller mentions "Utøya" and "automatic weapons". He also informs about "(…) a man walking around and shooting (…)", and that he is "(…) dressed as police".[108] During the conversation, both emergency lines at the two vacant operator desks at the OC start ringing. In the next couple of hours there is a seemingly endless stream of emergency calls. Because the OC has a phone system with limited functionality, it is not possible to see the size of the phone queue or who the caller is. Consequently, it is impossible to prioritize between the incoming calls or get a sense of how many are calling.

P1b and the Incident Commander staff the vacant operator desks for a brief moment to assist the Operations Commander in answering incoming emergency calls and mobilize own personnel. They leave the OC at approximately 17:30,[109] and head for the police garage to equip themselves for an armed operation on Utøya, i.e. put on appropriate uniforms, arm themselves, and make the police cars and the police boat ready.

One of the police officers, a criminal investigator by education and profession, is conducting an interrogation when the emergency calls start pouring in. At approximately 17:35, she enters the OC to assist the Operations Commander who has been working alone the last five minutes. The criminal investigator is very inexperienced as an operator but knows how to answer incoming calls and redirect them, and how to look up phone numbers to external actors. However, she is unfamiliar with the other instruments at the OC such as the PO-log. She decodes and registers incoming calls by writing messages on small pieces of paper, which she hands over to the Operations Commander

[107] The AMK-centre is the operation centre for the ambulance services.
[108] The Nordre Buskerud police, transcript of phone communication, 17:24:44.
[109] P1b ends his second and final call at the OC at 17:29:57.

(Nordre Buskerud Politidistrikt, 2011, pp. 36–37). Thus, the information streams coupled with her are loosely coupled and precarious. There is good reason to believe her assistance is of limited help to the Operations Commander.

More generally, the discrepancy between the staffing at the OC and the surge of tasks and problems that needs to be handled makes it in practice impossible for the Operations Commander to monitor and coordinate the police operation appropriately. Among the tasks the OC is expected to do in the current situation are: mobilize police capacities; monitor the police radio; register tactical dispositions and any other important information that is communicated via the radio; and, actively steer the police operation when deemed necessary. Like the Oslo police after the bomb explosion (cf. chapter 6), the Nordre Buskerud police district is in practice without a clear command structure in the initial phase of the police operation because the OC is outmanoeuvred by the surge of incoming information streams, pending tasks and problems that need to be handled.

The Incident Commander orders P1a and P1b to drive towards Utøya to get a visual and observe, while he will come along in the police boat. He does not give them any further instructions regarding location. His assessment is that they can make a more informed decision when they get closer to the island than he is currently able to (NB 15).

At 17:38, thirteen minutes after the Nordre Buskerud police received the first emergency call from Utøya, the Operations Commander asks via police radio, if all police units are on their way. She receives two replies. P1 reply they are on their way out from the police station, thus, P1 is the first police unit leaving the police station. The Incident Commander replies he is preparing the police boat and will launch it at *Vanførehjemmet*.

The Nordre Buskerud police district runs regular exercises with the police boat, and have designated boat drivers (Nordre Buskerud Politidistrikt, 2011, p. 32). The Incident Commander is one of them. Due to the exercises and pre-planning, he knows of a selection of possible locations he can choose from and knows immediately of an appropriate place (*Vanførehjemmet*) by the lake to launch the boat. The Operations Commander replies by informing the police

units that the local Fire and Rescue Service (FRS) also will come, and that they will bring their search and rescue boat.

The Incident Commander gets delayed because he has to pump up the pontoons on the boat due to low air pressure. Concomitantly, one of the police officers off duty, P2b, arrives at the police station. He has been alerted by one of the on-duty police officers via cell phone about the shooting situation. P2b has vast operative experience, including five years in Delta, the national anti-terror police. The Incident Commander and P2b leave the police station with the police boat at approximately 17:48 as the second police unit. When leaving the police station, they notice police officer P4 arriving at the police station, who has been called in from off duty.

Another off-duty police officer, P3a, has also arrived at the police station. Together with P3b and P3c, P3a gets ready to go with police car P4, but it won't start due to a flat battery. Therefore, one of them has to run back up to get the keys to police car P3. At 17:53 it is reported via the police radio that P3 with the police officers P3 a, b and c has left the police station (NOU, 2012, p. 116). The fact that the police boat and the police car P4 was not immediately operative indicates poor maintenance and supervision of the vehicles by the Nordre Buskerud police.

9.2.3 17:40-17:48: Inter-organizational crisis coordination

Back at the OC, the Operations Commander and the criminal investigator are fully occupied answering incoming calls and mobilizing more internal and external police capacities. At 17:40, the Operations Commander calls the OC in the Oslo police. She informs "we have an on-going shooting situation (…) will you come?". The Oslo OC replies "The Crisis Command Group [CCG] are trying to dispatch a helicopter from Rygge now to get Delta out there". "Helicopter" and "Rygge" refer to a helicopter base the Armed Forces has at the Rygge military air base, located 70 kilometres south of Oslo. As the police does not have own air transport capacities (cf. chapter 4), they are dependent on assistance from the Armed Forces for air transport. The Operations Commander at the Nordre Buskerud police informs the Oslo police what they thus far know:

"(…) a male arriving by boat, entered the island wearing a police uniform, shooting with an automatic weapon. People are down". [110]

The criminal investigator calls to alert one of the adjacent police districts, Asker and Bærum police district. It rings for three and a half minutes before she gets connected. She informs the operator at the Asker and Bærum OC there is a shooting situation at Utøya with an automatic weapon and that people are lying on the ground. The Asker and Bærum operator asks, "what do you need?". The operator does not get a clear answer but is requested by the criminal investigator to dispatch police units and possibly check cars coming from Utøya.[111] After the call, it is unclear for the operator what assistance the Nordre Buskerud police needs. The operator tries to call back, but several hours pass before new contact between the two OCs is established (Asker og Bærum politidistrikt, 2011, p. 33).

Immediately upon the conversation with the Asker and Bærum operator, the criminal investigator answers an incoming call from Søndre Buskerud police district, which asks how they can assist. The call ends with the Søndre Buskerud operator insisting on sending reinforcements and informs they will send them to the local police station for further instructions there (elaborated in 9.5).

At 17:48, the Operations Commander forwards the information she got from the conversation with the Oslo OC to the operative police personnel via the police radio. She informs that the Oslo police has been alerted, and "Heli comes eventually, and they might have Delta with them. Will get more information later".[112] The message is directed to P1, but anyone with access to, and their attention directed towards the police radio, hears the message.

Minutes earlier the commissioner in the Nordre Buskerud police received a different message from the Oslo police. The CCG Commander in Oslo informs the commissioner that Delta is on its way (O 4; NB 1). However, the commissioner is not at the police station at the time, she is on holiday. She calls the constituent commissioner and forwards the information to him, including that Delta is on its way (NB 1 and NB 2), but this information does not reach the

[110] The Oslo police, transcript of phone communication, 17:40:26–17:42:38.
[111] The Nordre Buskerud police, transcript of phone communication, 17:45:18.
[112] The Nordre Buskerud police, transcript of phone communication, 17:40:33.

Operations Commander. This may be because he assumes the Operations Commander has already been informed or because he is unable to get hold of the Operations Commander. In any event, what happens is that there are two lines of information sharing between the Nordre Buskerud police and the Oslo police respectively: i) between the OCs, ii) between the strategic level in the Nordre Buskerud police (the commissioner) and the Oslo CCG. In the former, the Nordre Buskerud police is informed that the Oslo CCG is trying to dispatch a helicopter to get Delta out, while in the latter, the message is that Delta is on its way.

9.2.4 17:45 (approx.): Change of command structure at the Operation Center

The police officer carrying out the CCG Commander function arrives at the police station approximately 17:45 and enters the OC. All the phone lines are ringing and there is much communication on the police radio. He is therefore unsure whether he should keep in the background to function as a distanced Operations Commander trying to get an overview of the situation, or, if he should start answering the incoming calls. He decides to do the latter (NB 9). He informs the present Operations Commander that he is taking over as Operations Commander and orders the former Operations Commander to handle the police radio and the on-going police operation while he will answer incoming calls. For convenience and readability, I will label them (new) Operations Commander and (former) Operations Commander respectively in the following.

Upon arrival, there is no information registered in the PO-log about the unfolding events that potentially could have informed the (new) Operations Commander, and others arriving later, about what is going on. The Criminal Investigator decodes and registers messages from the incoming calls by writing them down on handwritten notes, while the (former) Operations Commander does not prioritize spending time on decoding and registering in the PO-log in the first phase of the operation. The (new) Operations Commander is not briefed upon arrival in the OC on current status for the police operation (Nordre Buskerud Politidistrikt, 2011, p. 39). Twenty-seven minutes pass from the first emergency call until any registration is made in the PO-log.

9.2.5 17:48-17:56: Enacting an operation plan

Until the Incident Commander and P2b exit the police station at approximately 17:48 (NOU, 2012, p. 115), there has been limited communication on the police radio regarding what to do when arriving at the island. Thus far, only two messages: i) the Incident Commander has ordered P1 to drive towards Utøya to get a visual and observe; and, ii) the (former) Operations Commander has informed via the police radio that the local FRS is alerted and will bring its boat and that the Oslo police have been alerted and will come with a helicopter eventually – potentially with Delta.

Upon leaving the police station, P2b re-establishes a command structure for the operative units by giving instructions and orders to the other operative personnel on what to do via the police radio. He informs the (former) Operations Commander that P4 is on his way to the police station and can be the Incident Commander, while he will be the Task Force Commander.[113] He subsequently repeats this information directly to P1, tells them to keep observing the island when arriving at the pier, and that himself and the current Incident Commander are on their way with the police boat and will launch it at *Vanførehjemmet*. The Task Force Commander also informs that Utøya pier is the meeting point for the police and ambulances, and requests the OC to mobilize ambulances. P3 asks for the meeting point via the police radio and are ordered by the Task Force Commander to drive to *Vanførehjemmet* where the police boat will be launched.

The fact that P3 asks for the meeting point only one minute after the Task Force Commander informed about what the meeting point was is one of many examples that show it is hard for the police officers to hear what is communicated on the police radio. The radio coverage in the area around Utøya is very poor. Thus, there is much distortion on the information channel where the information streams are passing resulting in a lot of non-couplings and loosely coupled information-couplings. In addition, the police officers often have to direct their attention to other tasks than listening to the police radio, e.g. navigating to find

[113] The Task Force Commander is subordinate the Incident Commander and has the command at the operative level of a delineated part of the overall operation and reports to the Incident Commander.

the exact location of Utøya (few of the Nordre Buskerud police officers know where Utøya is) or launching the police boat. Thus, it varies significantly throughout the police operation to what extent the operative police personnel are coupled with the information that is shared on the police radio.

On several occasions before and upon arrival at Utøya pier on the mainland at 17:52, P1 reports what they observe over the police radio: a burning fire on the island, a series of five shots fired, and that there is a clear visual from the island towards the meeting point. Due to the latter, P1 suggests the meeting point to be moved up to the road adjacent to the pier. During the first minutes upon arrival P1 reports no observations of any boats in the lake. They look for boats, but all they see is a moored rowing boat on the lake about 20-30 metres from the pier. They are unable to see if it has oars and they deem it as an unsatisfactory solution to swim to the boat (Nordre Buskerud Politidistrikt, 2011, p. 40).

At 17:54 the Task Force Commander informs via the police radio that the local FRS is on its way with its boat. This is a repetition of the information given by the (former) Operations Commander fifteen minutes earlier. At 17:57 Delta are within reach of the coverage of the Nordre Buskerud police radio and report their presence over the police radio for the first time. Concomitantly, the Task Force Commander and Incident Commander arrive *Vanførehjemmet* where they launch the police boat, and P3 is on its way to the same location.

At this point, the Nordre Buskerud police have mobilized and dispatched all police capacities that are reachable within this time frame, which are three police units (P1, P2 and P3) and a police boat. In addition, it has allegedly requested assistance from the local FRS and Delta. The former is believed to be on its way with its boat, while the latter made its presence known on the Nordre Buskerud police radio at 17:57. Delta has not been able to communicate on the police radio earlier because it has been outside the bandwidth of the Nordre Buskerud police radio, and has been unable to establish contact with the Nordre Buskerud police via any other information channels (see next sub-chapter). Thus far, no one has reported seeing any civilian boats in the lake. As none of the operative police officers have detailed knowledge of the area around Utøya they

do not know that there is a private camping ground approximately 500 metres (in air distance) north of Utøya pier mainland. Nor are any of them aware of the spontaneous rescue operation emerging in the area between the camping ground and the island – residents and camping guests boarding their boats to rescue the many youths swimming away from the island.

9.3 Crisis coordination by the Oslo police and by Delta.

This sub-chapter examines the response by the Oslo police and Delta from when it received the first emergency call at 17:26 until the Nordre Buskerud police and Delta have direct contact for the first time at 17:57. Below is a timeline of the main events covered in this sub-chapter.

Timeline of the Oslo police and Delta response 17:25–17:57[114]

17:26 The Oslo police receives the first emergency call from Utøya.

17:30 First Delta unit dispatched to Utøya.

17:42–17:46 Six Delta units redirected from the government complex in Oslo to Utøya.

17:52 On request from Delta, the spouse of one of the Delta officers manages to get in contact with the Nordre Buskerud OC.

17:57 The Nordre Buskerud Operations Commander calls one of the Delta officers on his cell phone.

9.3.1 Status in the Oslo police at 17:25

Two hours have passed since the bomb explosion in the government complex. The Oslo police are fully occupied with inter alia search and rescue activities at the government complex, clearing the area around TV2, securing vital objects, mobilizing more capacities. The Crisis Command Group (CCG) has been fully staffed for 30 minutes and is about to start its second meeting.

The Oslo police mobilize all available Delta officers after the bomb explosion. The vast majority of them are dispatched to the government complex

[114] The timeline is based on information gathered from the 22 July Commission (NOU, 2012, pp. 114–116).

(NOU, 2012, p. 116). As the capacity of the local FRS operating at the government complex is constrained, the Incident Commander orders all present Delta officers, except one team, to assist in the on-going search and rescue operations in the government buildings. All Delta officers are trained smoke divers. One team is held back in case of new incidents (Oslo Politidistrikt, 2012a, p. 50). Thus, when the Oslo police receives the first emergency calls from Utøya at 17:26, many of the Delta units are already operative and the rest are getting themselves ready, which enables a swifter response than would have been the case if the shootings at Utøya had been the first terrorist attack.

At 17:25 the command structure of Delta is organized into three functions situated at three different locations enlisted in the table below.

Table 9.2: The Delta command structure on 22/7.

Label	Function and location
Delta's liaison in CCG	Represents Delta in CCG, located in the CCG-room at 5th floor in the main police station
Delta control center	It is located on ground floor in the main police station, operated by one or several Delta officers. Its task is to assist operative Delta units in on-going operations.
Delta Task Force Commander	Located at the government complex, together with the commanders of the emergency agencies (police, EMS and Fire Dept.)
D-32, D-33 etc.	Refers to the respective operative Delta units that were dispatched to Utøya

9.3.2 17:26-17:42: Information-coupling, directive actions and coordination

At approximately 17:26, the Oslo police are coupled with two information streams originating from Utøya. The first is coincidental. The second goes via the Oslo police "regular" information channel: the emergency number.

The first call is from a girl at Utøya who calls her dad who is a police officer. At the time he is in the Oslo CCG functioning as the POD's liaison (Oslo Politidistrikt, 2012a, p. 64). She informs: "- they are shooting here! There is a man in a police uniform shooting at us!" (Stensønes, 2017, p. 218). He hands the phone over to Delta's liaison in the CCG. He asks the girl if she has seen the

perpetrator and whether she knows how many they are. She replies negatively to both questions (Stensønes, 2017, p. 219). Delta's liaison takes the information very seriously, and immediately thinks there is a link between what he has just heard and the bomb explosion (Oslo Politidistrikt, 2012a, p. 64). Based on the information he got from the girl, his assessment is that it is necessary to immediately reorganize most of the available Delta officers and dispatch them to Utøya, although he also fears a new attack in Oslo (D 1). He returns to the CCG-room where the second CCG-meeting has just started. The question on top of the agenda is whether they should stop the public transport in Oslo or not. The risk of a secondary attack, potentially directed at the public transport, is weighed against the need for swift evacuation of the town center. Delta's liaison signals he has information of importance, and informs about the phone conversation he just had, that shots are being fired with automatic weapons at Utøya where there is a youth camp and that they have to respond immediately. The conversations in the CCG-meeting continue. One of the leaders at the meeting looks at Delta's liaison and tells him that they have to take one thing at the time, and what they have to handle first is the situation in Oslo. Delta's liaison informs a colleague who runs down to Delta Control Center to start reorganizing their Delta units to prepare for operation at Utøya (Stensønes, 2017, pp. 219–220).

Delta unit D-36 is at the time on its way to the government complex as part of the on-going mobilization of Delta personnel. The Delta control center redirects D-36 to Utøya. The time is approximately 17:30 (NOU, 2012, p. 116), which is eight minutes before the first police unit leaves the police station. D-36 is the first police unit heading to Utøya, regardless of police district. Some minutes later, when Delta's liaison returns to the room where the CCG is located, the OC has received a few emergency calls about the situation at Utøya. The CCG Commander tells Delta's liaison that they have to dispatch Delta units to Utøya.

The second call to the Oslo police related to Utøya is an emergency call received at 17:26.[115] The caller tells the operator she has received a call from a

[115] The Oslo police, transcript of phone communication, 17:26:06–17:28:38.

friend who is currently at Utøya and that shots are being fired. The operator knows which police district Utøya belongs to and tries to redirect the call to the Nordre Buskerud police district. Her immediate thought is "we have had a *bomb* here, that someone is shooting at Utøya is something they [Nordre Buskerud police district] have to take care of" (O 7). She then calls the Nordre Buskerud police. The Oslo police operator is lucky and gets through on first attempt, she asks: "(…) I received a call now and was wondering if there have been any, any shots fired at Utøya?". The Nordre Buskerud Operations Commander replies: "Yes, that you can say. There are people lying on the ground around there and we are dispatching now".[116] Soon after, they end the conversation. The Oslo police operator struggles a bit to decode the information she just received, but assumes people are lying down to seek cover. "I did not have any image of someone walking around and killing people. When I hang up I still thought, that incident is something they [Nordre Buskerud police] have to handle, because we have had a bomb here" (O 7).

Although she is in doubt, the operator decides to create a new "mission" in the PO-log and at 17:30 the following information is registered: "Shots fired at AUF's [Norwegian abbreviation for Worker's Youth League] camp at Utøya. Police in Northern Buskerud confirm this, and that several people are lying down".[117] She subsequently informs her Operations Commander, who tells her to forward the information to the CCG. She writes down the information on a note, walks out of the OC, gives the note to Delta's liaison in the CCG and informs him orally about the content of the note (O 7).

At 17:32 the Delta control center orders the Delta Task Force Commander at the government complex to head for Utøya. After discussing with the Incident Commander at the government complex, they agree to reallocate all, but two Delta officers, from the government complex to Utøya with immediate effect. To the knowledge of those in command at the government complex (Incident Commander and Delta Task Force Commander), no helicopter is available to transport Delta, and it is therefore decided to go by car.

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[116] The Oslo police, transcript of phone communication, 17:27:41–17:28:55.
[117] The Oslo police PO-log 112_203.

At 17:40, the POD's liaison in the CCG requests a helicopter from the 720-squadron at Rygge. They report back that they can have a helicopter operative and ready by approximately 18:15, which is too late as they need immediate assistance (Oslo Politidistrikt, 2012a, p. 66). The six Delta units departing from the government complex leave in the time span 17:42–17:46. By then, Delta has mobilized and redirected 26 Delta officers towards Utøya (NOU, 2012, p. 116).

9.3.3 17:42-17:57: Establishing contact: occupied channels and improvisation

It is paramount for Delta to get in contact with the Nordre Buskerud police because none of the Delta officers know where Utøya is, and the cars are not equipped with accessories that can enable them to find out.[118] Moreover, Delta needs to get a meeting point from the Nordre Buskerud police. When Delta assists police districts in an on-going operation the routine is that the police district requesting assistance gives Delta a meeting point where they meet up with the local police. In this case Delta is also dependent on boat transport to get across to the island. And, to better plan and prepare the coming operation Delta needs to get in contact with the Nordre Buskerud police to get more information on what threat they are facing.

The communication technology in the Nordre Buskerud police district is a barrier for swift communication between the Nordre Buskerud police and Delta. The main reason is that the Nordre Buskerud police district operates on a radio line with bounded reach. Hence, Delta (and any police units from other police districts) is unable to access the radio line until they are within its range. Furthermore, other police districts have no access to Nordre Buskerud police's PO-log. Access to the PO-log would however be of no help in this case because the Nordre Buskerud police have thus far not registered any information in its PO-log (cf. 9.2).

[118] The map books and the portable GPS in the first Delta unit yields no results when searching for 'Utøya'. The GPS show the lake, but does not show the names of the small lake islands in the area where Utøya is located (NOU, 2012, p. 116; Stensønes, 2017, p. 222).

A Delta officer in D-35, who earlier worked in the Nordre Buskerud police district, asks the Delta Task Force Commander, who is in D-04, if he should establish contact with Nordre Buskerud police, which the Delta Task Force Commander approves. The Delta officer unsuccessfully tries the Nordre Buskerud OC, the phone number to the police station and even the cell phone of the Operations Commander.[119] He calls two former colleagues now working in Nordre Buskerud police, again unsuccessfully. Eventually, the Delta officer calls his spouse, who is a police officer and lives in the area. He tells her to get in contact with the Nordre Buskerud police and inform them that Delta is on its way and can be reached on his phone number. She drives towards the local police station, but on the way, she eventually gets through to the Nordre Buskerud OC on her cell phone. She informs the criminal investigator that Delta is on its way and what phone number they can be reached on (Stensønes, 2017, pp. 223–224). The time is then 17:52. At 17:57, the Operations Commander calls back to the Delta officer. This is the first contact between Delta and the Nordre Buskerud police.

By 17:56, Delta has reorganized and dispatched five units to Utøya. On its way towards Utøya, the Delta Task Force Commander receives an update of the situation from Delta Control Center in Oslo. It reports it has information indicating there are several perpetrators who are heavily armed and that there may be explosives. The Delta Task Force Commander forwards the information to the other Delta units via their own line. Due to the poor coverage in the area, it is possible that not all Delta units get coupled with this information.[120] Moreover, this is the only information Delta has about what awaits them. They

[119] The D-35 officer and the Operations Commander had talked on the phone earlier that afternoon regarding the incident in Oslo. He therefore knew she was in command at the OC.

[120] What indications the police had regarding the number of perpetrators have become a contested issue in Norway (Stensønes, 2017, pp. 267–272; Stensønes, Inderhaug, & Mortvedt, 2017). For the context of this discussion it suffice to say that excerpts from interviews of Delta officers conducted by the 22 July Commission indicate that information about several heavily armed perpetrators and explosives was communicated by the Delta Task Force Commander on the Delta line, but it is possible that not all the dispatched units registered this information due to poor line coverage in the area (D 1-3, 5 and 7).

do not know where Utøya is, how many have been injured or killed and they have still not established contact with the Nordre Buskerud police.

The Oslo OC also tries to re-establish contact with the Nordre Buskerud OC but does not succeed. Eventually, at 18:03, one operator calls the OC in the Søndre Buskerud police to hear if it has a direct line to the Nordre Buskerud police that the Oslo police can use. The answer is negative. The Oslo operator then asks if it is correct that the Nordre Buskerud police operates "in analogue channel 26", referring to the Nordre Buskerud police radio. The Søndre Buskerud operator does not know and has no one to ask at the moment either. The question thus remains unanswered as they end their phone conversation.[121] The fact that the Søndre Buskerud operator does not know which radio channel the Nordre Buskerud police operate on can be seen as an indication that inter-organizational coordination between the OCs in the two police districts rarely happens.

9.4 Crisis coordination between Nordre Buskerud police and Delta

This sub-chapter examines the coordination between the Nordre Buskerud police and Delta from when they establish contact and until one perpetrator is reported arrested via the police radio. Below is a timeline of the main events covered in this sub-chapter.

Timeline of the joint response by Nordre Buskerud police and Delta 17:57–18:36[122]

17:58 Meeting point for the arriving police is changed from Utøya pier mainland to *Storøya*.

18:05 Task Force Commander and Incident Commander from Nordre Buskerud police drive from *Vanførehjemmet* in the police boat.

[121] The Oslo police, PO-log 18:03:42–18:05:02.

[122] The timeline is based on the 22 July Commission report (NOU, 2012, pp. 114–141).

18:07 D-34 arrives as first police unit at the new meeting point, *Storøya*.

18:11 The Nordre Buskerud police boat passes the bridge to *Storøya*. The boarding of the boat starts immediately upon arrival.

18:15 The police boat departs from *Storøya* with eleven police officers in armor and heavy equipment. The boat is registered for ten persons.

18:19 The police boat halts. A civilian boat comes to the rescue within approximately 30 seconds. The civilian boat is registered for five persons, but ten police officers board the civilian boat.

18:24 Another civilian boat arrives, and the police officers regroup themselves in the two boats.

18:27 First boat (civilian) with four police officers arrives Utøya. Head north on the island. By this time, three more civilian boats with police officers are on their way towards Utøya.

18:28 Second boat (civilian) with six police officers arrive Utøya. They head south on the island after hearing shots fired.

18:36 The police on the island report to the OC that one perpetrator has been arrested.

9.4.1 Status at 17:56: Two police districts and Delta mobilized and on their way

By 17:56, thirty minutes after the police received the first emergency calls from Utøya, Delta and two police districts – Nordre Buskerud police and the Søndre Buskerud police (examined in 9.5) – have dispatched police units towards Utøya.

To recap, just before 17:57, when the first direct communication is made between Nordre Buskerud police and Delta, the Nordre Buskerud police are on their way with three police units and its police boat. They have been informed that the local FRS is on its way with its boat, and that helicopter and Delta may come eventually from Rygge/Oslo. Delta is on its way in seven cars. All they know is that there is an on-going shooting situation at Utøya, there may be several heavily armed perpetrators and explosives. The Nordre Buskerud police have limited knowledge about Utøya and its surroundings, Delta has none.

Figure 9.2: Map over Utøya and its surroundings.

The map on figure 9.2 gives an overview of the area around Utøya. A brief explanation of the names on the map that is of relevance here. *Hønefoss* is the name of the city where the main police station of the Nordre Buskerud police is located. Vanførehjemmet is the place where the Nordre Buskerud police launched its police boat on 22/7. *Oppmøtested* (meeting point in English) *Storøya* is what eventually became the meeting point for the arriving police. *Utvika camping* is where camping tourists and local residents organized a spontaneous rescue operation to rescue the youths that were swimming in the

lake. *Oppmøtested Utøya brygge landsiden* refers to what was the initial meeting point for the arriving police.

9.4.2 Approx. 17:57-17:59: Multiple lines of communication

From around 17:56 onwards the extent of communication on the Nordre Buskerud police radio increases significantly as more police units from both the Nordre Buskerud police and Delta enter the on-going Utøya police operation. This can be illustrated by the following stream of exchanges on the police radio in a time span of two minutes from 17:56 to 17:58:[123] P4 call for the Task Force Commander, which is interrupted by P1a reporting they need to scramble boats because he see people swimming in the lake; then the Operations Commander report that the man shooting came in a silver-gray van and it is relevant to get control of the car; then another operator interrupts, reporting: "important message to everyone: caller says the person shooting is wearing a police uniform and is last observed in the white building"; P1b then reports observing a rowboat with several people rowing away from the island and that people are swimming away from the island; P1b is interrupted by Delta who makes their presence known on the Nordre Buskerud police radio for the first time: "Delta 36 to Delta units reporting that they are listening on working channel 26, report of a silver-gray van that may be of relevance";[124] P1b continues, reporting about the rowboat and three people swimming towards mainland; the Task Force Commander respond to P1b and tell them [P1a and P1b] to receive the boat and informs that "Delta is listening in our channel now. That means they are on our side of Sollihøgda [location south-east of Utøya] and will shortly be in your position. Work now to get boats, get boats to the Delta units (…) Even if we have to take some civilian boats that are out there, try to get them operative"; P1b respond that they have copied.

[123] The Nordre Buskerud police transcript, 17:55:50-17:57:45.
[124] This message was intended as a message to the Delta Task Force Commander to inform him D-36 now had reached Nordre Buskerud police district, but the Delta officer unintentionally took the wrong radio microphone in the car and the message was therefore communicated on the Nordre Buskerud police radio instead of Delta's internal radio (Stensønes, 2017, p. 222).

Ordering P1 to get boats to Delta and the suggestion to retrieve boats from the Red Cross are, to my knowledge, the first attempts to mobilize more boats made by the police during police operation Utøya. The Task Force Commander does this as soon as he is made aware that Delta is not far away and realize more boats may be needed to be capable of transporting all the Delta units over to the island (NOU, 2012, p. 125).

The stream of exchanges reiterated above elucidates the intensity of the radio communication at this stage of the police operation. Within a time span of two minutes no fewer than seven different police officers report information via the radio, two for the first time (P4 and D-36). Moreover, there is a broad variety in what is reported from descriptions of the perpetrator, his car, current observations around the island, to new police units arriving and orders to operative units on what to do next. It is amidst this peak of streams of personnel joining in on the operation and information streams on the radio that the meeting point for the police is changed from Utøya pier mainland to Storøya.

9.4.3 17:58-18:01: Two dialogues on "locked" channels, two meeting points

At 17:58 the Task Force Commander calls D-36 via the police radio. The reply from D-36 is hard to interpret. The Task Force Commander recognizes the voice of D-36 from his time working in Delta. Due to the poor radio signal he asks D-36 to call him on his cell phone.[125] Then the Task Force Commander suggests to the OC via the police radio that it can try and retrieve boats from the Red Cross's water unit.

D-36 calls the Task Force Commander back on his cell approximately at 18:00 and asks for the meeting point. The Task Force Commander replies by repeating what he has announced earlier to the Nordre Buskerud police units via their police radio: the meeting point is Utøya pier mainland (Nordre Buskerud Politidistrikt, 2011, pp. 42–43). D-36 passes Utøya pier mainland at 18:01, thus concomitantly as they receive the information from the Task Force Commander (NOU, 2012, p. 126). The timing of when D-36 are coupled with this information

[125] Nordre buserud police transcript, 17:58:29-17:59:16.

combined with the fact that they do not know the area and that it is hard to see the traffic sign to Utøya pier mainland, are probable explanations why D-36 does not drive down to the pier, but instead continues on the main road.

Around the same time as D-36 make its presence known on the Nordre Buskerud police radio for the first time and subsequently is informed about the meeting point by the Task Force Commander, the (former) Operations Commander (abbreviated OC in the dialogue below) calls back to the Delta officer in D-35 on the cell phone number she received minutes earlier from the criminal investigator, which got it from the spouse of one of the Delta officers (cf. 9.3).

> (…)
> D-35: (…) do you have any boat alternatives, so we get over there?
> OC: Yes, there are boats out. FRS has a boat and the police have a boat.
> D-35: Yes, and we are dependent on having someone to meet us. So we get straight over.
> OC: Meet you straight over. Are you on your way in heli now?
> D-35: We are on our way by car. Will pass Sollihøgda within four minutes.
> OC: Four minutes, but shall… are you driving down to the pier?
> D-35: Yes, will it be the pier out by the golf course there[?].
> OC [talking to the (new) Operations Commander in the background]: It will be out by the golf course. NN, it will be out by the golf course. Because Delta is coming by cars and they are at Sollihøgda within a few minutes.
> D-35 [interrupts]: Yes, it will be the easiest, in order to pick us up by boat. But if you can make sure that there is someone that can pick us up by the pier by the golf course.
> OC: By boat. Then I will put, I will work on that while you are driving.
> D-35: Perfect. (…)[126]

This dialogue strengthens the impression that the (former) Operations Commander, before talking with Delta, was under the impression that Delta would arrive by helicopter. Her tone signals surprise when hearing where they are, and that they are arriving by car. Furthermore, this is the third time it is communicated that the FRS is on its way with boat, but this time it is via a "locked" channel so no one else but the (former) Operations Commander and D-35 can hear it.

[126] The Nordre Buskerud police transcript, 17:57:24-17:58:45.

The Delta officer's reply to the question of meeting point, "will it be the pier out by the golf course there[?]", had, according to his statement to the 22 July commission, a verifying purpose, because he did not know of any other piers in the area (NOU, p. 127). The (former) Operations Commander, however, seems to have interpreted his reply as a decision, as she did not question it, nor did she inform that a meeting point had already been decided by the Task Force Commander. Instead she forwarded the message to the (new) Operations Commander, "It will be by the golf course", who did not object to this. The (new) Operations Commander had hardly any information on the current situation at this point because he did not get, nor ask for, a brief update on the situation when he took over the command at the OC ten minutes earlier. Therefore, he is unaware that the Task Force Commander has already decided a meeting point when the (former) Operations Commander talks with D-35.

Thus, within approximately three minutes, the Nordre Buskerud police and Delta establish two lines of communication: (former) Operations Commander/D-35 and Task Force Commander/D-36. This is problematic for two reasons. First, because the communication is via cell phones and telephone, no one except those involved in the two conversations had any knowledge of the conversations taking place. Had the (former) Operations Commander and D-35 communicated via the police radio, anyone with access to, and attention towards, the Nordre Buskerud police radio would have heard it and could potentially have interfered and questioned their decision of a meeting point. In a similar vein, had D-36 and the Task Force Commander communicated via the Nordre Buskerud police radio, D-35 and/or the (former) Operations Commander could potentially have heard their dialogue on the meeting point and questioned why the Task Force Commander said a different meeting point than the (former) Operations Commander.

Second, the four police officers involved in the two lines of communication are at different locations: the (former) Operations Commander is in the OC, the Task Force Commander is by the police boat, and D-35 and D-36 are in two different police cars. Had the (former) Operations Commander and

the Task Force Commander, or D-35 and D-36, been at the same location they could potentially have become aware of the other line of conversation.

9.4.4 Approx. 17:59-18:10: Uncertainty on what is the meeting point

On his way to Utøya, P4 tries to get in contact with the Task Force Commander via the Nordre Buskerud police radio. He calls the name of the Task Force Commander several times without getting any response. This is most likely because the Task Force Commander at this point is busy launching the police boat on the lake as well as redirecting P3 towards Utøya mainland.

While there is no response from the Task Force Commander, D-35 responds to P4 by asking if he is at the location and if he can be Delta's local guide. P4 says he is on his way, but needs to get meeting point confirmed.[127] D-35 replies that the meeting point is "…the pier by the golf course" (NOU, 2012, p. 128). No one questions this information. However, it is unknown how many actually hear this dialogue on the police radio due to the poor coverage in the area around Utøya. And, it is uncertain who is sufficiently attentive to what is communicated on the police radio at this point in time.

In the subsequent minutes until the first Delta Units and P4 arrive at the pier by the golf course the uncertainty on where the meeting point is persists. Several of the Delta units stop on their way to ask locals where Utøya is. Moreover, as late as 18:09, the question of the meeting point is discussed on the police radio among operative units (NOU, 2012, p. 128).

The P4 arrives at the pier by the golf course as the first police unit at 18:08. The Delta units arrive in the next couple of minutes. When they arrive, there is no boat on standby to pick them up. The P4 reports to the OC that it is urgent to get boats to their location. There are numerous civilian boats parked by the pier. Delta officers try unsuccessfully to get these started (Stensønes, 2017, p. 230).

[127] The Nordre Buskerud police transcript, 18:00:11.

9.4.5 18:11-18:27: Getting to the island: Overload and motor halt

On their way to Utøya mainland pier, the Task Force Commander and Incident Commander in the Nordre Buskerud police boat are surprised when they spot Delta officers and Nordre Buskerud police officers at the pier by the golf course at Storøya. They are unaware the meeting point has been changed, thus, they have not heard the communication on the radio regarding meeting point. They arrive at the pier approximately 18:11 and Delta personnel start boarding the boat immediately (NOU, p. 115).

To ease the boarding, the Incident Commander steers the bow of the boat up on a rock at the breakwater to stabilize it. This presses the stern of the boat downwards, and the pressure is reinforced when the police officers board the boat, causing the stern of the boat to take in water. A total of eleven police officers (eight Delta officers, the Incident Commander, P4 and the Task Force Commander), many of them heavily equipped and armed, board the police boat, as well as two shields and a battering ram. The boat is registered for ten people (Nordre Buskerud Politidistrikt, 2011, p. 30), presumably without much additional gear.[128]

One of the police officers left on the pier kicks the bow of the boat loose from the breakwater. The time is then almost 18:15. As the boat drifts off the breakwater, it does not level. The boat moves slowly in the water. It does not accelerate and eventually, at 18:19 the engine halts. Only seconds later, a small-sized civilian boat (17 feet) comes to the rescue. The civilian boat has been directed towards Storøya by one of the Nordre Buskerud police officers in the first police unit P1. On orders from the Delta officer in command, all equipment and all police officers, except the (former) Incident Commander and the civilian, are loaded over from the police boat to the civilian boat (Stensønes, 2017, p. 233). However, the civilian boat is only registered for five persons. Thus, the police officers once again overload the boat they have at their disposal. The boat

[128] Statements from police officers involved in the boarding of the boat differ to some extent on whether something was communicated during the boarding of the boat regarding the number of people and whether to stop boarding more people. I have not made further inquiries to try and clarify what happened on this point because I believe it would be a difficult task considering the time lag.

therefore proceeds slowly when they are ready to move forward at 18:21. Shortly after, another civilian boat (21 feet) arrives at the scene. Also this boat has been directed towards Utøya by P1. Four of the Delta officers go over to this boat, and both boats proceed towards the island at 18:24. Simultaneously, Delta asks over the police radio for last observed position of the perpetrator(s).[129] P1a responds that shots were fired at the back of the island about ten minutes earlier.

9.4.6 18:27-18:36: On the island: Detecting the perpetrator(s)[130]

The two boats arrive at Utøya at 18:27 and 18:28 respectively. The rest of the Delta officers arrive at the island in civilian boats in the following eight minutes.

Upon arrival at Utøya, the four Delta officers from the first boat are puzzled. They had been expecting armed confrontation as soon as they landed on the island but hear nothing but silence. Swiftly upon landing on the island they come across some youths and ask them where they have seen perpetrators. The youths point north, and the Delta officers proceed north along the seaside.

As the second boat arrives at the island they hear shots fired on the south side of the island. The five police officers, two from the Nordre Buskerud police and three from Delta, run south. The one in front carries the shield for protection and the rest in tactical formation behind him. After a couple of minutes of running, hearing nothing but their own voices they suddenly hear a shot fired nearby. They detect one perpetrator and approach him. The perpetrator surrenders without resistance. The arrest is reported on the Nordre Buskerud police radio at 18:36. It is estimated that the police officers approached the perpetrator approximately two minutes earlier (NOU, p. 120-121).

In the preliminary questioning of the perpetrator, he says he has not acted alone. There are two more cells. At 18:39, P4 reports back to the OC that there are allegedly two more cells that will strike at other locations in the country.[131] Two minutes later, the Nordre Buskerud OC forwards the information to the desk

[129] The Nordre Buskerud police, transcript of radio communication, 18:24:16.
[130] This section draws heavily on Stensønes (2017, p. 236–266). Her book about Delta draws on, among other things, personal interviews with most of the Delta officers that took part in the police operation on Utøya.
[131] The Nordre Buskerud police transcript, 18:39:18.

at Kripos and requests Kripos to send an email via the national alarm system,[132] which Kripos does at 18:50:

> Message to all districts! One person arrested related to the shooting at Utøya. Nordre Buskerud police reports that he has explained that there are two more cells in Norway that have yet to strike. We have no more information than this (NOU, 2012, p. 152).

This was the third email Kripos distributed via the national alarm system on 22/7. Like the two previous ones, few of the police districts registered this email on the evening of 22/7. The time horizon for my analysis of police operation Utøya ends here upon the arrest of the perpetrator. It is however important to emphasize that the situation was still unclear and the uncertainty pervasive at this point. For example, one Nordre Buskerud police officer who arrived and entered the OC at approximately 18:45, ten minutes after the perpetrator was arrested, described it as: "Felt at that point that everything was on, but would have needed five minutes to get a real overview. Everything was chaotic, and it was hard to prioritize" (NB 12).

In hindsight it is easy to forget the pervasive uncertainty at the time and how long it persisted. Many of the operative police personnel on the island were certain there were more perpetrators on the island (Stensønes, Inderhaug, & Mortvedt, 2017; D 2, 4, 5 and 7). In fact, two youths were arrested suspected of being perpetrators.[133] Moreover, time passed before other emergency personnel were allowed on the island because the situation was deemed too insecure. More generally, many hours passed before the police felt they had the situation relatively under control. I now go approximately one hour back in time to examine the response by the Søndre Buskerud police.

[132] The Nordre Buskerud police transcript, 18:41:22.
[133] One of those arrested was not released from custody before the following day.

9.5 Crisis coordination by the Søndre Buskerud police

This sub-chapter examines the response by the Søndre Buskerud police from when it received the first emergency call at 17:25 until the police units dispatched to assist the Nordre Buskerud police arrived at the meeting point at Storøya around 19:04. Below is a timeline of the main events covered in this sub-chapter.

Timeline of Søndre Buskerud police response 17:25–19:04[134]

17:25 Receives first emergency call from Utøya.

17:37 Requests Delta to assist at Utøya.

17:47 The first of four police units leaves the police station in Drammen and is directed to the Nordre Buskerud police station in Hønefoss.

17:59 The OC receives an emergency call where the caller reports that shots are being fired from Utøya mainland.

18:07 The information that shots are being fired from Utøya mainland is distributed to the operative units via police radio. The last of the four police units decides to change course and drive towards Utøya.

18:20 First police unit arrives the police station in Hønefoss.

18:59 The fourth police unit arrives at the meeting point set by the Nordre Buskerud police for arriving police units taking part in the police operation.

19:04 The three other police units arrive at the meeting point.

9.5.1 Status in Søndre Buskerud at 17:25

The Operations Center (OC) in the Søndre Buskerud police is staffed with an Operations Commander and two operators on the afternoon of 22/7. They follow the news coverage on the bomb explosion in Oslo, while executing routine tasks. Upon the explosion in Oslo, many off-duty police officers call the OC to inform that they are available for service if needed (SB 1-3). At one point one of the

[134] The timeline is based on information gathered from the Søndre Buskerud police evaluation (Søndre Buskerud Politidistrikt, 2011) and the 22 July Commission (NOU, 2012, pp. 113–120). The first emergency call was received at 17:25:37.

operators asks the Operations Commander if they should do anything regarding Oslo. The Operations Commander responds that they will await a request for assistance from the Oslo police (SB 2). The national alarm sent by Kripos, via the internal alarm system, at 16:43 has not been not registered by the Søndre Buskerud police. When the Søndre Buskerud police receive the first emergency call from Utøya at 17:26, the police district has not implemented any measures to mobilize own police capacities.

Due to a technical error, calls from cell phones with NetCom subscriptions are forwarded to the Søndre Buskerud police instead of the Nordre Buskerud police (NOU, 2012, p. 113). Therefore, the Søndre Buskerud police also receive many emergency calls in the first hours after the shootings at Utøya begin. Between 17:00 and 22:00, the Søndre Buskerud police receive 144 emergency calls of which 76 (53 %) are answered (Søndre Buskerud Politidistrikt, 2011, p. 4).

9.5.2 Information-coupling, directive actions and coordination

The first emergency call from Utøya is received by the Operations Commander at 17:25. He knows that the Nordre Buskerud police have a low level of staffing. On his own initiative, he takes directive action to implement necessary measures to dispatch assistance to the Nordre Buskerud police (NOU, 2012, p. 117). While talking to the caller, he orders one of the operators to call the Nordre Buskerud police district and alert them. The operator tries to reach the Nordre Buskerud police at least three times over the next twenty minutes before she succeeds (Søndre Buskerud Politidistrikt, 2011, p. 3).

In the meantime, all operative police units are ordered via the police radio to the police station with immediate effect, and the leader of the UEH-unit[135] is called back from holiday (NOU, 2012, p. 117; Søndre Buskerud Politidistrikt, 2011, p. 14). The police units are however not informed why they have been called in to the police station. Therefore, not all police units drive full speed with their sirens on back to the police station (SB 5). The Operations Commander and

[135] Every police district has a UEH-unit. The police officers in this unit have more operative training annually than the ordinary police officers, and represent 'the sharp end' in the police districts (cf. chapter 4.4).

Incident Commander brief the operative personnel at the police station, before they reorganize the operative personnel. It is decided to dispatch six police officers to assist the local police, in addition to two experienced police officers mobilized from off duty. The rest of the police personnel have to remain in their own police district. The Operations Commander assesses it as unwise to dispatch all units to Utøya because they have now witnessed two incidents in two different police districts within a short time span. Thus, they should keep some capacity in their own district in case something happens there (SB 1). At this point, they have yet to establish contact with the Nordre Buskerud police.

9.5.3 Inter-organizational crisis coordination

Based on the content of the emergency calls they receive from Utøya, it is quickly evident for those at the OC that there is need for specialized police capacities. Therefore, one of the operators call the Oslo police at 17:37 to alert about a man that has ["gone berserk" and that he is "wearing a police uniform". The first response from the operator at the Oslo police is "Yes, but we have many other things to take care of". The Søndre Buskerud operator continues: "Yes, I thought this was a task for Delta and that is why we are calling you". The response she gets from the Oslo police operator is that the operator will "(…) run it by them here and then report back to you".[136]

At 17:47, approximately concomitantly as the first police unit leaves the police station in Drammen, one of the operators eventually gets in contact with the OC at Nordre Buskerud police, after waiting five minutes in a queue. She asks what they can do to help. The Nordre Buskerud operator responds they can be on the lookout for a man that had arrived on the island and started shooting with automatic weapons (NOU, 2012, p. 117). This answer makes no sense as the shooting is on-going as they speak. Thus, the shooter(s) is evidently still on the island. The Nordre Buskerud operator has limited experience to match the environment she is in. She is a criminal investigator by profession, not an operator (elaborated in next sub-chapter). The Søndre Buskerud operator is persistent and informs the Nordre Buskerud operator they have already

[136] The Oslo police transcript, 17:36:40 – 17:37:28.

dispatched five police officers that are on their way to the local police station in Hønefoss, and that personnel from the UEH-unit also can be mobilized and dispatched to assist. The conversation ends with the Søndre Buskerud operator insisting that their police units continue towards Hønefoss, for then to be returned by the Nordre Buskerud police if their assistance is not needed.[137]

This is the first and last call for hours between the Søndre Buskerud police and the Nordre Buskerud police. Thus, it is practically impossible to communicate or share information directly between the OCs in the two police districts in this time period.

9.5.4 Directing police units into the unknown

Eight police officers were dispatched to Nordre Buskerud police district from the Søndre Buskerud police organized in four police units. The first police unit leaves Drammen police station approximately 17:47 (NOU, 2012, p. 117). The Operations Commander does not have a good feeling about dispatching police units to a police operation he has so little knowledge of (SB 1). At 17:59 the OC receives an emergency call where the caller reports that shots are being fired from Utøya mainland. This information is forwarded to the UEH-leader at 18:04 via phone, and to the police units via the police radio at 18:07 (Søndre Buskerud Politidistrikt, 2011, p. 20).

The police units are ordered by the OC to drive to the main police station first, not directly to Utøya. This may seem puzzling as driving to Hønefoss, where the main police station of the Nordre Buskerud police is located, is a detour if the final destination is Utøya. As can be read off the map below, the shortest way from Drammen to Utøya is north via highway 285, alternatively east on highway 282 via Sandvika, then north on freeway E16 (282/E16 has better road conditions than 285). Taking E134/E35 and driving on the west side of the lake Tyrifjorden via Hønefoss is undoubtedly a longer route. The order to drive to Hønefoss, instead of Utøya, does cause some frustration in the first police unit, but they follow the order from the OC (SB 5).

[137] Søndre Buskerud police district, transcript of conversation.

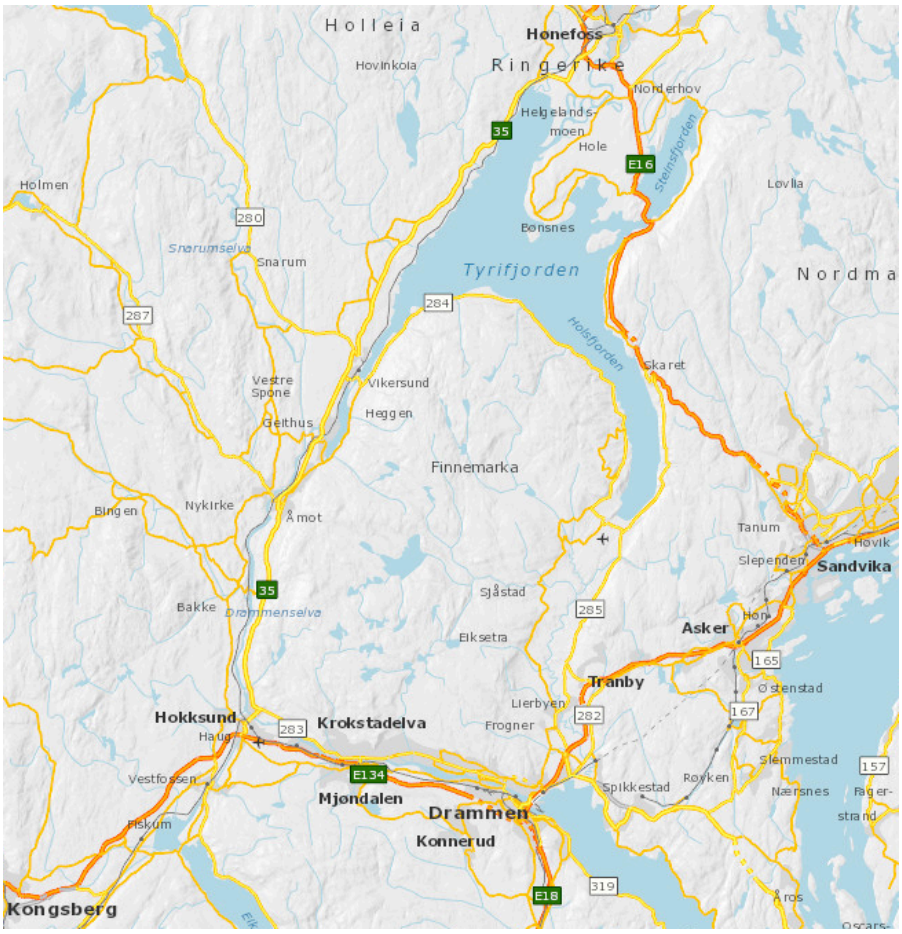

Figure 9.3: Possible routes to Utøya for the Søndre Buskerud police.

The last of the four police units ordered to assist the Nordre Buskerud police decides to change course and drives directly to Utøya, because they deem it as more appropriate considering the character of the mission and the need for swift response (SB 4 and 5). Furthermore, based on the information that shots have been fired also from the mainland, the police unit changes its course to potentially stop any getaway-cars fleeing south (Søndre Buskerud Politidistrikt, 2011, p. 3). The fourth police unit therefore drives east on Highway 284 when passing Vikersund and heads towards Utøya. This police unit arrives at the meeting point established by Nordre Buskerud police at 18:59.

The three other police units arrive at the police station in Hønefoss at 18:20 and 18:29 respectively. They report their presence to the Nordre Buskerud OC. They await orders from the Nordre Buskerud police for some minutes, before driving towards Utøya. They arrive at the meeting point at 19:04. According to the 22 July Commission, the first police unit could have arrived at approximately 18:30 if it had taken the fastest route (NOU, 2012, pp. 118–120). This would have been approximately 15–20 minutes after Nordre Buskerud police and Delta started boarding the police boat and a few minutes before the perpetrator was arrested.

9.5.5 Potential coordination underlap

Due to a technical error on the cell phone network, the Søndre Buskerud OC were swiftly coupled with information about shootings at Utøya. Like the situation upon the explosion in Oslo (cf. chapter 8), this was a potential case of coordination underlap. The Søndre Buskerud police received no request for assistance from the Nordre Buskerud police, and the standard procedure for so-called "neighbor assistance" is to send assistance upon request. Alternatively, to offer assistance when it is believed there is a need. In any case, you await the response from the affected police district. In this case, the Søndre Buskerud police had no knowledge of the situation apart from what was reported in the emergency calls. However, the Operations Commander knew about the low level of staffing in the Nordre Buskerud police and therefore dispatched four police units to assist. This directive action by the Operations Commander was proactive and countered the potential risk of coordination underlap.

The cause of the potential coordination underlap was twofold. First, the Nordre Buskerud OC was initially staffed only with the Operations Commander and was therefore overloaded with tasks. There was therefore limited capacity at the Operations Center to request assistance from adjacent police districts in the initial phase (see also next sub-chapter). Second, there was no way for the Søndre Buskerud police to bypass the long queue of incoming calls to the local police. The functionality of the Nordre Buskerud OC was limited, there was no way to see the queue of incoming calls and thus no way to prioritize between the incoming calls. According to one of the operators in the Søndre Buskerud police

it was not unusual that it was hard to get through to the local police, even on regular days (SB 2). The Operations Commander recalls thinking: "Where is that goddamn red phone, the hotline service that ensures communication between the police districts? It does not exist, and it was missed" (SB 1).

A final point worth mentioning is the decision to direct the police units to Hønefoss instead of directly to Utøya, and the subsequent response of the operative personnel. From the first emergency call, the OC is informed about the location of the shooting situation. Why then not dispatch its police units to take the shortest route to the known location? One possible explanation is the pervasive uncertainty that existed. Another explanation could be the routinized response of neighbor assistance – you normally send the police units to the affected police district where they are subordinated to the command of the affected police district. With no knowledge of the operation plan for the Nordre Buskerud police at the time, it might have been deemed easiest and safest to direct the units to the local police station in Hønefoss – otherwise they could potentially have disrupted an on-going operation. A more general point is that a side effect of the largely autonomous police districts is that the general norm is that it is the commissioner and the operations center that have the command in own police district, including over police capacities sent from other police districts. Regarding the response by the operative police units, merit and experience seem to be a probable explanation why the first police units obeyed the order from the OC to drive to Hønefoss police station, while the last police unit chose to change its direction. The leader of the UEH-unit, with extensive operative experience and the one in command at the operative level, was in the last police unit.

This forms the end of the first main part of this chapter. I now turn to the second part (9.6-9.8), where I briefly examine two other parts of the police operation: how the local Fire and Rescue services (FRS) was mobilized (9.6), and two instances of self-organization (9.7).

9.6 The mobilizing of the local Fire and Rescue Service

The local Fire and Rescue Service (FRS) with its own search and rescue (SAR) boat was an important capacity in the police operation, but only after the gunman was arrested. Why was the boat not mobilized earlier?

There are three central actors in this part of the operation: the Nordre Buskerud OC, the 110-central and the local FRS. It is necessary to briefly explain the function of the two latter actors. Norway has three emergency phone numbers, one for the police (112), one for the ambulance services (113) and one for the Fire and Rescue Services (110). If you call 110 you reach an operator at the 110-central in your region. The 110-centrals are divided into regions while the local FRS services are organized in the municipalities. Thus, one 110-central covers many municipal FRS services. Utøya is within the jurisdiction of Viken 110-central which encompasses 35 municipalities. In 2011, the Viken 110-central (hereafter 110-central) was jointly located in Drammen together with the Operations Center of Søndre Buskerud police and the regional Operations Center for the ambulance services. In the following I outline the efforts made by the Nordre Buskerud OC to mobilize the local FRS (9.6.1) and then the actions made by the 110-central and the local FRS (9.6.2).

9.6.1 The role of the Operations Center at the Nordre Buskerud police

At 17:37, the Operations Commander in the Nordre Buskerud police informs on the police radio that the local FRS has been alerted and is on their way with its SAR boat. Prior to this, the Operations Commander has ordered the criminal investigator who assisted as operator, to call the 110-Central and request assistance from the local FRS and its SAR boat to the police operation. The criminal investigator tries to call the 110-central but is unsuccessful because of a technical malfunction on the keyboard.

From June 2011, the 110-central became part of the new digital radio line which integrated the radio lines of the FRS services, ambulance services, and some of the police districts. The Nordre Buskerud police was however not part of ICCS. But when the 110-central implemented the new system it ensured that

Nordre Buskerud police got a new direct number, so they would get priority when calling the 110-central. However, when the Nordre Buskerud police inserted the new phone number in their own system it was linked to the wrong key on the keyboards of the operators. The error was not detected prior to 22/7 (Nordre Buskerud Politidistrikt, 2011, pp. 37–38; V110, 2011, p. 9). If the new phone number had been linked to the correct key on the keyboards, there is reason to believe that the criminal investigator would have succeeded in establishing contact with the 110-central when she tried calling them just before 17:37.

The criminal investigator informs the Operations Commander at one point that she has not been able to establish contact with the 110-central (Nordre Buskerud Politidistrikt, 2011, pp. 37–38). The Operations Commander does not make any new efforts to establish contact with the 110-central before 18:01. After 51 seconds she gets connected and asks "Do you have a boat on its way towards Utøya?" The 110-central confirms that they are alerting the local FRS now.[138] This is just after the Operations Commander has had first direct communication with Delta at 18:57 (cf. 9.4), and it becomes evident to the Operations Commander that Delta will arrive soon and that they are not coming by helicopter. But what made the 110-central mobilize the local FRS although the 110-central had at this point not received any request to do so from the Nordre Buskerud police?

9.6.2 Information-coupling by chance and proactive action

The 110-central receives the first emergency call from Utøya at 17:29. This call is immediately redirected to the Nordre Buskerud police, but without any communication with the police by the 110 operator. In the subsequent minutes, the 110-central receives a number of emergency calls from anxious and terrified youths at Utøya who report inter alia about "shooting at Utøya", "someone dressed in police uniform who suddenly shot civilians", "terrorist attack at Utøya" (V110, 2011, p. 3). In the twelfth[139] emergency call the 110-central

[138] Nordre Buskerud police transcript, 18:01:50.
[139] In three of these twelve emergency calls, the operators at the 110-central are unable to establish contact with the caller (V110, 2011, pp. 3–4).

receives, at 17:38, the caller says: “send boats, we need boats” (V110, 2011, p. 4). The general reply the operators at the 110-central give to the callers is that the police have been alerted and on their way. This is however only an assumption the operators at the 110-central make as none of them thus far have been in contact with anyone at the Nordre Buskerud OC and can thus not know for certain that the police are on their way.

The fire station of the local FRS is located approximately two kilometres from the Nordre Buskerud police station in Hønefoss. When police unit P2, with the Incident Commander, the Task Force Commander and the police boat, leaves the police station approximately 17:46 and drives towards Utøya, it passes the local fire station a few minutes later. One of the firemen coincidentally notices the police car with the police boat at full speed as it passes the fire station. He informs his colleagues about what he just saw.

The Fire Commander at the fire station calls the 110-central and asks what is going on. The operator replies there is a shooting situation at Utøya. The Fire Commander asks if there is a need for assistance with transporting wounded. The operator replies that they know nothing more. At this point the 110-central have not been in direct contact with the Nordre Buskerud police and thus knows nothing more than what has been reported in the emergency calls. However, as already mentioned, the 110-central is jointly located with the Operations Centers of the Søndre Buskerud police and the regional ambulance services respectively and they receive emergency calls from Utøya around the same time as the 110-central. Moreover, the Operations Commander of Søndre Buskerud police decides at an early point that the three commanders of the 110-central, police’s Operations Center and the AMK-Center should exchange operative information of vital importance (V110, 2011, pp. 8–9).

The Fire Commander is not at ease after the conversation with the 110-central, because he has information indicating an on-going shooting situation at Utøya[140]. His impression is reinforced by the observation by his colleague.

[140] The Fire Commander cannot recall whether the call with the 110-central was the first time he heard there was a shooting situation. He may also have gotten

Moreover, he has an understanding that there are wounded people on the island, and hence, will be a need for transport of wounded people and/or health personnel (FRS 1). Based on these considerations he orders his firemen to dispatch the boat and head towards Utøya.

At approximately 18:00, the Operations Center of the regional ambulance service asks the 110-central to request assistance from the local FRS and the stretchers they possess.[141] One of the operators at the 110-central then calls the Fire Commander at the local fire station in Hønefoss. The operator requests the Fire commander to dispatch his team with their boat and head towards Utøya. The operator adds they have to drive by the local hospital to collect stretchers. At 18:16 the local firemen arrive at Sundvolden where the boat is immediately taken over by the police, who still are in need of more boats. The boat is launched on the lake at 18:22, and is from then on an active part of the police operation (V110, 2011, p. 3).

Why did the Nordre Buskerud police not do more to establish contact with the 110-central, and why did the 110-central on its own initiative not request the local FRS services to dispatch its boat earlier when it knew there was an on-going shooting situation at Utøya? In one call, the caller even explicitly stated they needed boats. I return to these questions in the discussion.

9.7 Coordination by self-organization

Thus far I have focused on the efforts by the police to mobilize and coordinate police capacities and boats for the operation at Utøya. The response to the shooting massacre at Utøya included many more police personnel, other

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such information already from monitoring the radio communication of the pre-hospital emergency services or from social media (FRS 1).

[141] I do not have exact documentation of this call in the data material I collected. But in the conversation at 18:02 where the Operations Commander requests assistance from the 110-central, the 110 operator replies "We are alerting them [local FRS] now, because we received a message about it from AMK" (The Nordre Buskerud police transcript). This interpretation is corroborated by the local Fire Chief who, when interviewed by NRK in 2014 said they were informed "…a bit after 18:00 that something was going on at Utøya, because AMK called then and requested our stretchers" (NRK, 2014).

emergency agencies, organizations and civilians than what I have covered in the previous sub-chapters. I have focused on those actors deemed most relevant for the scope of my analysis and to answer my research question. In this final sub-chapter, I will briefly reiterate the response of two groups that are interesting and relevant for the scope of this analysis. They are interesting because they can be seen as exemplars of coordination by self-organization and can thus function as illustrative contrasting cases when discussing the findings of this chapter, and the thesis more generally.

9.7.1 Self-organization by off duty-police officers

At Modum, which is part of the mid-region in the Nordre Buskerud police district located on the western side of the lake where Utøya is, one police officer off duty is sitting at home watching the television news coverage from Oslo. Around 18:00, the prime minister is interviewed and says there has been "an incident at Utøya". The police officer reacts immediately. He knows AUF has its summer camp there and many youths are gathered on the island. He texts a colleague, and then calls a friend whom he knows has a boat available. He tells his friend to get the boat ready. Both the friend with the boat and the colleague who is texted react immediately. The two police officers drive to the Nordre Buskerud police station in Vikersund to get armor and weapons. They leave the police station at 18:24 and meet up with the friend, who, in the meantime, has made the boat operative and ready. They then drive directly to Utøya where they arrive approximately 18:50 (Johansen, 2012).

The response by the two police officers is swift. It takes them around fifty minutes to get from their homes to the police station, get geared up, launch a boat and get to Utøya. From the police station to Utøya it took them approximately 26 minutes. In comparison, it took the Nordre Buskerud police around 62 minutes to get to the island and about 39 minutes from when P2, the police unit with the police boat, left the police station to the first police unit was at the island. Two factors explain much of the difference in response time: i) the delay caused by the overloaded police boat that eventually halted, and ii) the fact that the two off-duty police officers did not have to spend time on launching the boat. In comparison, P2 spent approximately nine minutes from they arrived

Vanførehjemmet until they had launched the boat on the lake and proceeded towards Storøya and Utøya (NOU, 2012, p. 115). Nevertheless, self-organization as in the case of the two police officers evidently goes faster as there is no need to wait for clearance or approval and no one else you have to coordinate with on the way. At the same time, what would have happened if all police officers simply self-organized and drove directly to the island? What are the pros and cons of such a response? I will return to these questions in the discussion section.

9.7.2 The civilian rescue operation

Utvika camping is located on mainland north east of the island *Utøya*, approximately 1 km north of *Utøya pier*. Many of the visitors at *Utvika camping* are "regulars". They come every summer and stay for several weeks. They are therefore used to some noise from Utøya during the week *AUF* host their annual political youth camp on the island.

Most people at Utvika camping are still in shock from the TV news from Oslo about the bomb explosion, when some of them start hearing abrupt bangs from the island. That the abrupt bangs are shots being fired is far from most people's minds. Even when they see youngsters swimming in the sea they do not immediately assume something criminal is going on. As one of the campers has described, he reflected upon whether the youths from AUF possibly were arranging a swimming competition and that the bangs were the sound of a start pistol (Juvet & Juvet, 2012, pp. 10–12). This image can serve as an illustration of how unreal the situation that unfolded in the next minutes and hours must have been for the civilians in proximity to Utøya. Thus, they were put in an unexpected situation and as civilians they had no common organizational routines in their response repertoire to draw upon.

When they start realizing what is going on they react spontaneously. Some respond proactively: they run to their boats to sail out in the lake and pick up terrified youths swimming away from the island. Others respond reactively: they remain on the mainland to help the youths when they arrive on the mainland. Others again respond passively: they are understandably frightened by the situation and search for shelter at the camping site, or they try to drive away from the area (Juvet & Juvet, 2012).

One of the proactive campers describes what he felt when he realized the youths were swimming for their lives as: “Now things are happening fast, it is like the body enters some type of operation mode. I know without knowing it that now I have to perform something that I yet do not know what is” (Juvet & Juvet, 2012, pp. 12–13). Thus, he struggles to make sense of the situation, but it is clear to him that people’s lives are in danger and that he has to do something. He instinctively knows this, he has no available tools in terms of routines or the like to guide him, so he simply acts.

As time passes the number of youths arriving mainland at *Utvika camping* and the area around rises. Many wonder why there are no signs of health personnel, and call the AMK-Center. Some even give the GPS-coordinates of their position, so it should be easy to trace. The response they get is short and negative – “we cannot come because the area is not considered secure by the police”. Civilians who were involved in the rescue operation at *Utvika camping* from before 18:00 have estimated it took more than four and a half hours before any medical personnel came to assist (Stølan & Grøttum, 2012).

The spontaneous rescue operation at Utøya by campers and local residents is by any standards impressive, but it is not exceptional. Decades of research on civilians and non-professional first responders have demonstrated that proactive civilians playing a decisive role in the crisis response is the norm rather than the exception (e.g. Drabek, 2007; Helsloot & Ruitenberg, 2004; Rodriguez et al., 2007; cf. also chapter 2). Non-professional response groups emerge and take action.

This begs the question why the police did not to a greater extent consider civilians as a potential capacity in the initial phase of the crisis response? A more general question is why the spontaneous rescue operation was so well coordinated, while the police operation was, by many, considered a coordination failure in the aftermath of the crisis? I return to these questions in the discussion.

9.8 Discussion

What were the main coordination challenges in police operation Utøya? Why were helicopters not used in the parts of the police operation Utøya examined in this chapter? And, why were the local FRS services and their boat not mobilized earlier? These questions are answered in the three first sections of the discussion (9.8.1-3). The remainder of the discussion analyzes police operation Utøya by employing the multiple streams framework (9.8.4).

In addition to the actors examined in this chapter, the OCs at the Asker and Bærum and Vestoppland police respectively are also included in the discussion. They are included because the two police districts are, similar to the Søndre Buskerud police, adjacent to the Nordre Buskerud police district and it is thus relevant to include their involvement when discussing the police efforts to coordinate police capacities to Utøya. The response of Asker and Bærum and Vestoppland police was covered in chapter 8.

9.8.1 Inter-organizational coordination: The main challenge

As the empirical analysis demonstrates, coordinating police capacities within own police district during the police operation Utøya was a minor challenge on 22/7. [142] The Søndre Buskerud and Oslo police and Delta mobilized and reorganized own police capacities to free police units that could be dispatched to assist the Nordre Buskerud police. This happened without any major challenges. Also, the Nordre Buskerud police managed to mobilize and dispatch all available

[142] It must be emphasised that my claim only concerns the timespan examined in this chapter. There were severe challenges related to the coordination of own personnel in subsequent hours. For the Nordre Buskerud police some would maybe even argue the challenges increased. One main reason for this is that the complexity of the operation increased; as the stream of incoming police capacities continued to increase in numbers so did also the number of collaborating actors. However, for the adjacent police districts I would argue most of the challenges of coordinating own police capacities in the subsequent hours of police operation Utøya were related to district-boundary/inter-organizational coordination challenges. For example, the Søndre Buskerud police struggled with communicating with its police units in the police operation, because they operated on a different radio set when operating on the island (Søndre Buskerud Politidistrikt, 2011).

police personnel and more from early on despite the poor problem-fit at the OC and the significant limitations in its communication technology.

The major coordination challenges the police encountered in police operation Utøya was linked to inter-organizational coordination, i.e. coordination between police districts. The Søndre Buskerud police and Delta were dependent on information (e.g. meeting point) and capacities (e.g. boat) from the Nordre Buskerud police, while the most significant coordination challenges the Nordre Buskerud police encountered came when interacting with other actors, cf. for example the changed meeting point and the problems with the fire boat. Furthermore, as table 9.3 demonstrates, it seems that every time the OCs communicated with OCs in other police districts in the first part of the police operation (17:25-17:57), i.e. prior to when Delta and the Nordre Buskerud police established direct contact, either the caller or the recipient was left with more questions than answers when the conversation ended.

Table 9.3: Calls between the OCs 17:25-17:57.

Time	Caller	Recipient	Questions unanswered
17:29	Oslo OC	Operations Commander*	What is actually going on at Utøya? What does "people are lying down" mean?
17:37	Søndre Buskerud OC	Oslo OC	Will Delta assist at Utøya?
17:40	Operations Commander*	Oslo OC	When will Delta assist at Utøya?
17:45	Criminal investigator*	Asker and Bærum OC	What assistance is needed?
17:47	Søndre Buskerud OC	Criminal investigator*	What assistance is needed?

* Nordre Buskerud police

In the first conversation between the Nordre Buskerud and the Oslo OCs it remained unclear to the Oslo operator what in fact was happening. In the second

conversation, it was unclear to the Nordre Buskerud OC when Delta would assist at Utøya. Around the same time the Søndre Buskerud OC also contacted the Oslo OC to request assistance from Delta to assist at Utøya without getting a clear answer. In the conversations between the Nordre Buskerud OC and operators from adjacent police districts (Søndre Buskerud and Asker and Bærum) it remained unclear for the operators what assistance the Nordre Buskerud police needed.

Thus, the OCs had five opportunities to share information orally and thus develop a shared situational awareness and a more coordinated response. Instead, the inter-organizational information sharing induced new unanswered questions and the uncertainty persisted.

There are two obvious explanations to why inter-organizational crisis coordination was a significant coordination challenge. In the words of the 22 July Commission, the lack of "well-functioning communication tools" and the "low staffing at the OC [at the Nordre Buskerud police]" were two of the most important explanations to why the police operation Utøya was characterized by "(…) considerable weaknesses in the crisis preparedness of the police, and their execution of the police operation" (NOU, 2012, p. 146). However, I contend that solely pointing to the low staffing at the OC and lack of well-functioning communication tools is too simple an explanation. As demonstrated in the empirical analysis, and reiterated in table 9.3, the OCs did manage to exchange information on five occasions in the initial phase of the operation, despite the low staffing and the limitations in the communication technology. Although the setting of the five cases differs, and thus the explanations of why they ended with unanswered questions differ,[143] I would argue there are two explanatory factors, in addition to the two already mentioned, that had a significant impact in all five cases.

[143] For example, in the cases from the two bottom rows in table 9.3, one of the two involved in the dialogue was very inexperienced with being in an OC (the criminal investigator), which most probably was an important explanatory factor in those two instances.

First, the pervasive uncertainty that existed at the time of the dialogues. The unprecedented characteristics of the setting probably played a role when the operator from the Oslo police struggled to grasp what the Operations Commander of the Nordre Buskerud police was describing. Uncertainty pertaining to the details of what was going on at Utøya intensified the challenge for the Nordre Buskerud police to clarify what kind of assistance it needed. The decision taken by Delta, and subsequently the Oslo CCG, to dispatch Delta units to Utøya was unknown to the operators at the Nordre Buskerud OC until Delta made its appearance on the Nordre Buskerud police radio for the first time.

At the same time, although the uncertainty was pervasive, it was evident already from the first emergency call that there was a dramatic situation at Utøya where people were being shot at. Undoubtedly, the lives of innocent people were at great risk and swift assistance from the police could potentially save lives. This raises the question of how to appropriately mobilize and dispatch police units into the "unknown", i.e. how the OCs can direct and coordinate its police capacities outside own jurisdiction when establishing contact with the OC in the affected police district is difficult, and information on the unfolding incident is scarce. I return to this question in a later section.

Second, the inexperience of the OCs, and the police districts more generally, with inter-organizational coordination, particularly in a crisis, exacerbated the coordination challenge. As argued in chapter 4, there was limited crisis coordination across police districts (and between national and local level) in the 2000s, both in terms of training and exercises and in their everyday police work. Moreover, the crisis preparedness guidelines said nothing about the role of "neighbor assistance" in crisis coordination. This was a designed incapacity, a void in the guidelines, and there is reason to believe that the void received little attention because inter-organizational crisis coordination was rarely practiced. And, the few times the guidelines and procedures were exercised and weaknesses detected, little was done to remedy them.

The inexperience with inter-organizational information sharing and coordination reinforced the sense of uncertainty by adding a sense of insecurity concerning "what does a person like me do in a situation like this" (March &

Olsen, 1989). Not only was the incident unprecedented but being an operator /Operations Commander who coordinates with other operators / Operations Commanders (and CCGs) was for many a new role and a new experience.

9.8.2 Mobilizing helicopter capacities

No helicopters were used in the police operation Utøya in the time span examined in this chapter. Could helicopters have been used, and could it have made a difference?

Although all police personnel in the police helicopter service were on holiday in July 2011, the Oslo police could have mobilized and had a police helicopter airborne at an earlier point on 22 July (cf. chapter 6). It took almost two hours from when the police helicopter was mobilized until it was airborne, which is about the same time span as there was between the bomb explosion in Oslo and when the police started receiving reports of shooting at Utøya.[144] Thus, had the police helicopter been mobilized in the minutes after the explosion it could have assisted in the police operation Utøya. Although the police helicopters cannot be used to transport police personnel or as a shooting platform it could have been used for searches over the island. If it had been equipped with a thermal camera or binoculars, the police could presumably at an earlier point have found out that there was only one person on the island who was armed with firearms. This would have been valuable knowledge for the operative police personnel, both before the arrest, but also in the minutes that followed, because it took time before the police were certain that there had only been one gunman.

While Delta was reorganizing its officers in the government complex to prepare for a second operation at Utøya, its commanders were informed at 17:40 by Norwegian Armed Forces' (NAF) liaison in the POD that the Armed Forces could have Bell helicopters ready for Delta at approximately 18:15 (Oslo Politidistrikt, 2012a, p. 66). This was too late because Delta needed immediate transport. Moreover, the time estimate by the NAF's liaison turned out to have been a bit optimistic. At 18:57, about 45 minutes later than estimated by NAF's

[144] One of the police helicopters was mobilised at 19:09 and airborne at 21:06 (cf. chapter 6.5.2).

liaison, the first Bell helicopter was airborne at Rygge. The Bell helicopter arrived at Utøya at 19:30 (Oslo Politidistrikt, 2012a, p. 73). As explained in chapter 4, the Bell helicopters in the 720 squadron had before 2009 functioned as a national counter-terrorism capacity available for the police on request with a two-hour response time. This changed in 2009, because some of the capacities were redirected to participate in operations in Afghanistan. If the Bell helicopters had had a two hours response time on 22/7 they could presumably have been airborne at an earlier point than they actually were. Whether they could have been airborne in time for Delta when they were reorganizing their officers around 17:40, two hours and fifteen minutes after the bomb explosion, is more uncertain. It would have hinged on how swiftly the Armed Forces mobilized the Bell helicopters.

One issue that caused some debate in the aftermath of 22/7 was whether Delta could have used a Sea King helicopter that was, from 17:09 onwards, located at Voldsløkka, a sports field which is approximately six kilometres from the government complex in Oslo. The Sea King had been directed there by the Joint Rescue Coordination Center (JRCC) upon request from the regional Operations Center for the ambulance services. The Sea King was there on standby in case of a need for transporting patients from Oslo to other hospitals. The police were not informed by the JRCC or the OC for the ambulance services about the Sea King on Voldsløkka.

However, the police did not ask or request for a Sea King at this point of the operation either. According to the Delta's liaison in the Oslo CCG, they had requested the two air transport capacities that they knew were available for them and those were the police helicopter service and the Bell helicopters. Because neither of these helicopter capacities were available Delta chose to travel by car (D 1). His point is that they did not regard the Sea King as an air transport capacity they could rely on, because assisting the police was not its top priority, but a third priority (cf. chapter 4). Interesting in this regard is that the Oslo police requested the JRCC at 14:56, 23 July, that one of their Sea King helicopters be configured for anti-terror. The goal was to have an air transport capacity available in case of a new incident. The JRCC turned down the request. The

decision was “appealed” to the Ministry of Justice, which maintained the decision by the JRCC (Sønderland, 2012, p. 71). The fact that the request from Oslo police was turned down amidst the deadliest attack in Norway in peacetime illustrates that the Sea King was not a capacity that the police could rely on with certainty. At the same time, it is puzzling why the Oslo police did not issue the request to JRCC earlier than it did.

The Sea King helicopter at Voldsløkka could have functioned as an observation platform for Delta akin to the way the police helicopter could have been a useful asset in the police operation Utøya. However, the Sea King helicopter is a larger helicopter and primarily used for transport and search and rescue. The Sea King helicopter could also in principle have been used to transport Delta officers to Utøya, but according to Delta’s liaison in Oslo CCG, they would probably not have used it even if they had known about it. The reason is twofold. First, they could not be fully certain they could use it, cf. discussion above. Second, the Sea King helicopter was at the time equipped for transport of patients. The helicopter would have to be reconfigured in order to be ready to transport police officers, which would have taken some time (D 1).

9.8.3 Coordination underlap: Mobilizing the local FRS

The reactive mobilization of the local FRS services and their search and rescue boat resulted from a coordination underlap that emerged due to a combination of technical malfunctioning on the keyboard of the Nordre Buskerud OC and the passive response by the 110-central to the emergency calls it received in the first part of the police operation. This begs (at least) two questions: why did not the Nordre Buskerud OC make more efforts to establish contact with the 110-central, and why did not the 110-central respond more proactively to the incoming emergency calls?

The Nordre Buskerud OC would have most likely gotten through to the 110-central earlier, if the malfunction with the keys on the keyboard of the operators had been detected prior to 22/7. Why it was not detected falls outside the scope of this thesis. Still, the fact that the malfunction had not been detected indicates that they did not have regular tests of this part of their communication systems. We know that the Operations Commander ordered the criminal

investigator to call the 110-central at some point before 17:37, because that was when she reported on the police radio that the local FRS services had been alerted. Therefore, there is reason to believe that the Nordre Buskerud OC would have established contact with the 110-central before 17:40 if the keyboards in the Operations Center had not been malfunctioning.

But why did not the Operations Commander make any new efforts in the time span between 17:37 and 18:01 to ensure that contact with the 110-central had been established and the local FRS services was on its way? It must be pinpointed that I do not know *when* the Operations Commander was informed by the criminal investigator that she had not succeeded in reaching the 110-central. Thus, I do not know exactly how many minutes the Operations Commander had this information before she made the call at 18:01. That being said, there is reason to believe that the combination of low level of staffing at the Operations Center (poor problem-fit) and the surge of calls and pending tasks made her more reactive than proactive in her response. Another element that may have played a role is that she assessed that other tasks were more urgent; that it was first when talking directly with Delta she realized they were nearby and it became evident to her that getting more boats was of utmost importance.

Another important aspect related to the Nordre Buskerud police is that for the first 35 minutes of the police operation, the operative units had an incorrect understanding of the boat situation. They had reason to believe the FRS was on its way with its boat as this was called on the Nordre Buskerud police radio two times during this first phase of the operation, first by the Operations Commander, then, reiterated by the Task Force Commander. This was, as we have seen, incorrect. Thus, their shared situational awareness was in part based on incorrect information. Neither the Operations Commander, nor the criminal investigator corrected the incorrect information that had been communicated on the police radio.

Then comes the question of why the 110-central did not request the local FRS services to dispatch its units and boat towards Utøya earlier? Between 17:29

and 17:55, the 110-central received 19 emergency calls from Utøya.[145] In an emergency call received at 17:38, the caller even encouraged the operator to send boats. In the internal evaluation by the 110-central two factors are emphasized. The first factor pertains to the lack of contact with the local police, which made it difficult for the operators to know what they could assist with and how (V110, 2011, pp. 8–9). To this it can be argued that they could have tried to initiate contact themselves. Whether they would have succeeded in establishing contact if they had tried is unknown given the queue of incoming calls at the Nordre Buskerud OC. The second factor is related to the organizational design. There were no standard operating procedures in the 110-central's contingency plans and framework on how to act in incidents where weapons are involved, so-called "shooting in progress" -incidents. When receiving request for assistance in such incidents, the established practice was that the 110-central and Fire Brigades exclusively follow the instructions and guidelines given by the police. Therefore, based on previous experiences it was assumed that "… if we were wanted at the incident scene, they would initiate contact" (V110, 2011, p. 10).

The consequence of the 110-central waiting for a request for assistance and the Nordre Buskerud police unsuccessfully trying to request assistance was an emerging coordination underlap. This could have been countered by more proactive action by the 110-central, but it did not happen. Instead it was the Fire Commander at the local FRS that responded proactively and dispatched his team and the boat although their assistance had at that point not been requested.

"So what?", a critical reader may ask. The story of the emergent coordination underlap between the Nordre Buskerud police and the 110-central which resulted in a late problem-coupling of the local FRS services and its boat, i.e. it took time before they became coupled with handling the problem, is of utmost importance, because a swifter problem-coupling could have had significant impact on the outcome of the police operation.

[145] The number is based on a simple count of the emergency calls documented in a transcript of telephone and radio communication from the 110-central included in an internal report from the 110-central (V110, 2011, pp. 3–4).

We know Delta and P4 from the Nordre Buskerud police were present at Storøya from approximately 18:10 and was ready to set out for the island had there been boats available. Moreover, the first police unit, P1, was present at Utøya pier mainland at 17:52 and could have set out for the island had there been boats available. According to the local Fire Chief, the local FRS could have had the boat operative in a couple of minutes and "… been at Storøya in about 15 minutes. The boat is almost on the water within those 15 minutes" (NRK, 2014). If we add this information with the fact that the criminal investigator was trying to call the 110-central at some point before 17:37, there is good reason to believe the FRS services and their boat could have been at Storøya around 17:52-17:55 if the call from the criminal investigator had reached the 110-central. In any event, the boat would have been at Storøya before P4 and Delta arrived from approximately 18:10 onwards.

9.8.4 Taking a streams approach

In the remainder of the discussion I conceptualize and explain the findings in the empirical analysis by employing the multiple streams framework outlined in chapter 2. I start by conceptualizing the directive actions that were taken along the two dimensions I focus on: responsiveness and degree of routinization, followed by a discussion of whether the proactive actions were qualitatively better than the reactive actions. I then turn to the role of time by discussing time as sequential logics, time as tempo, time as timing and related to the latter, information-couplings as coincidental. Then I pinpoint an implication of the temporal dynamics, which come to the fore by employing the multiple streams framework combined with a prospective research strategy: that the level of shared situational awareness fluctuated. Finally, I discuss whether self-organization could have been the remedy for the coordination challenges the police encountered in police operation Utøya.

Taking directive action: routinized responsiveness

In chapters 2 and 3 I explained how I conceptualize and operationalize directive actions along the two dimensions of responsiveness and degree of routinization. The former is the function of the scope of (what types and total number of

capacities is mobilized), and the speed of, the action (cf. 3.2.4). The latter is conceptualized in accordance with the typology I outlined in 2.3.5: routinized and contingent actions and adaptive and creative improvisation.

In brief, I conceptualize the directive actions taken to enable crisis coordination in police operation Utøya as routinized responsiveness. The directive actions taken differ along the responsiveness dimension, to what extent they were proactive or not. Still, all actions can be classified as routinized actions, cf. table 9.4. Two of them can also be conceptualized as adaptive improvisation (discussed below).

Table 9.4: Overview of directive actions taken in police operation Utøya.

Actor	Responsiveness	Degree of routinization
Delta	Very proactive	Routinized
Fire and Rescue Service	Very proactive	Routinized
Søndre Buskerud OC	Very proactive	Routinized / adaptive improvisation
Nordre Buskerud OC	Proactive	Routinized
Asker and Bærum OC	Proactive	Routinized / adaptive improvisation
Oslo CCG	Proactive	Routinized
Vestoppland OC	Reactive	Routinized
110-central	Reactive	Routinized

Those in command at the Delta, the local Fire and Rescue Service (FRS) responded very proactively. Once they were coupled with information about shooting at Utøya they took immediate action to mobilize and dispatch all police capacities they had available at their disposal. Also, the Nordre Buskerud OC dispatched all the police capacities it had available and more. But, although it tried to mobilize the FRS and its boat, the Nordre Buskerud OC was unsuccessful in its first attempts and it took time before this was followed up. I therefore conceptualize the response by the Nordre Buskerud OC as proactive rather than very proactive.

The Asker and Bærum OC and the Oslo CCG are conceptualized as proactive, rather than very proactive, because it took some time before they decided to mobilize and dispatch police capacities to Utøya. In the case of the Oslo CCG it was a matter of a few minutes. However, as shooting massacres like the one at Utøya sadly demonstrate, a few minutes delay can be decisive and have deadly consequences.

At the other end of the scale are the Vestoppland police (cf. chapter 8) and the 110-central whose directive actions to enable crisis coordination were reactive. They both awaited request for assistance before they mobilized and dispatched capacities in direction of Utøya even though they received reports of shooting on the island.

The directive action taken by the aforementioned actors did not only differ in their responsiveness. They also differed in what they actually did. Delta immediately mobilized and headed towards Utøya; so did the FRS. In contrast, the 110-central and the Vestoppland OC awaited request for assistance. The remaining police actors discussed here took action, but it differed what they did. I argue these differences are a consequence of different routines, operative experience and professional identity – and, in case of the OCs, what information they were coupled with. Thus, although the actors included in table 9.1 differed in what they actually did, all the directive actions can be conceptualized as routinized actions.

The primary goal of Delta is to assist police districts when terrorist attacks and similar incidents occur. Thus, dispatching Delta units directly towards Utøya was embedded as part of the professional identity of the Delta officers. That is what they are trained for, and that is what they do. The goal of the local FRS is to prevent fires and conduct search and rescue operations when emergencies occur. When the Duty Fire Commander realized shots were being fired at Utøya he perceived it as an emergency where there could be wounded and/or casualties and that there could be a need for search and rescue operations.

In contrast to Delta, the operators at the 110-central are inexperienced with shooting situations. Furthermore, the procedures at the 110-central prescribe that the operators do nothing without request and approval by the

police; it took about thirty-five minutes of the police operation before they received it. In a similar vein, the procedures for the emergency agencies at the operative level prescribe that other emergency agencies such as FRS are to await orders from the police – they are not to enter the incident scene before the police assess the area as secure. Thus, the local FRS are expected to dispatch when there is an incident, but how to proceed when arriving at the incident scene was dependent on approval by the police. It is reason to believe that this nuance in the procedure of the local FRS and the 110-central played a role on 22/7. In addition, one explanatory factor may be differences in operative experience. The local FRS is on the operative level and therefore evidently has more operative experience than the operators at the 110-central who are on the intermediate level.

Turning to the OCs in the police districts adjacent the Nordre Buskerud police district, their responses differed. The Søndre Buskerud OC dispatched its police units to the main police station in the Nordre Buskerud police district instead of directly to the island, while Asker and Bærum OC awaited some time before dispatching its police units to Utøya. When civilian lives are endangered, the police has a duty to act. However, as discussed in chapter 8, it is not clear-cut what the OCs are expected to do when civilian lives are endangered, but the situation is happening outside own jurisdiction. The main concern of those in command at the OCs (and CCG) is handling problems within own jurisdiction. Any assistance to police districts affected by a crisis is supposed to be coordinated with the affected police district. The OCs in Søndre Buskerud and Asker and Bærum respectively were unsure about where to dispatch its police units, because they struggled to establish sufficient contact and coordinate with the Nordre Buskerud OC.

But why do I conceptualize the reactive directive action taken by Vestoppland police as routinized when I simultaneously conceptualize the proactive directive action taken by the two other police districts adjacent to the Nordre Buskerud police as routinized? My argument is that they were coupled with different information streams. The Søndre Buskerud OC received emergency calls directly from Utøya, which gave them first-hand information

about what was going on. The Asker and Bærum OC received some information about what was going on via relatives of youths present on the island. Moreover, the Asker and Bærum OC was encouraged by the Nordre Buskerud OC to take action, although it was unclear exactly what type of action it requested.[146] In contrast, the Vestoppland OC received no first-hand information and the one time it had contact with the Nordre Buskerud OC it received no call for action or requests for assistance. In sum, the different information-couplings gave the Vestoppland OC weaker incentives than the OCs in Søndre Buskerud and Asker and Bærum respectively to dispatch units to Utøya. Based on the information Vestoppland OC got coupled with in the initial phase, I conceptualize that its decision to await request for assistance can be assessed as in accordance with existing routines.

Were the proactive actions qualitatively better?

One pressing question that emerges from the discussion of the directive actions is the quality of the directive actions taken. Was the reactive response by the Vestoppland OC poorer in quality compared with for example the OCs in Søndre Buskerud and Asker and Bærum or Delta?

It is easy to assess the actions based on how the subsequent events unfolded. However, that is information those in command did not have in real time. Take for example Delta's decision to dispatch all but one unit to Utøya. Based on what subsequently happened it was a correct and good decision. But what if there had been a third terrorist attack in Oslo or south of Oslo (the opposite direction of Utøya)? Then it would have taken time before Delta could mobilize and dispatch a sufficient group of units to handle the third attack. Moreover, several of those in command at Delta believed they were facing a

[146] Regarding the OCs in Søndre Buskerud and Asker and Bærum respectively, it can also be argued that their actions can be conceptualized as adaptive improvisation. In the dialogue between Søndre Buskerud OC and the Nordre Buskerud OC, it was the former that was persistent on insisting that it would dispatch units to the police station of the latter. And the Asker and Bærum OC was not asked to dispatch units to Utøya by the Nordre Buskerud OC, but eventually it still did. In this sense, their directive actions can be conceptualized as adaptive improvisation.

group of terrorists. For example, when they heard witness observations from Utøya describing a man in police uniform akin to observations made at the government complex, this reinforced their assumption that they were facing an organized group of perpetrators (D 1, 2 and 5). The basic point I want to make is that the directive actions taken by Delta can be questioned, just like the directive actions taken by those in command at the Vestoppland police. At the same time, it is difficult to yield a clear-cut answer to whether their directive actions were good or bad, because they were taken under extreme uncertainty. In addition, I have argued that both the actions of Delta and the Vestoppland OC were routinized, i.e. they were in accordance with pre-existing crisis coordination structures and practices.

As I argued in chapters 2 and 3, by taking a prospective approach, studying crisis coordination in real time situated in its broader historical and institutional setting, the uncertainty of the crisis setting and how the actions were conditioned by pre-existing structures and practices comes to the fore. As a preliminary conclusion, I would argue that it is difficult in retrospect to make value assessments of directive actions taken under extreme uncertainty. In particular if the actions can be construed as being in accordance with, rather than in conflict with, existing crisis coordination structures and practices.

Sequential logic

When the shootings at Utøya started, 22/7 changed from being a singular to a sequential crisis. The shift elucidated how prior actions and inactions can have a significant impact on the subsequent trajectory of the crisis coordination. The first police unit dispatched to Utøya was a Delta unit, not a police unit from the Nordre Buskerud police. Delta was already mobilizing, because of the bomb explosion in Oslo, while the Nordre Buskerud police had not enacted any measures upon the incident in Oslo. They were informed about the explosion but were unaware of the national alarm that Kripos distributed at 16:43 (cf. chapter 7).

Tempo in police operation Utøya

In the aftermath of 22/7, one of the strongest criticisms that was raised was that the police were too slow to dispatch capacities to Utøya, which also was one of the main conclusions of the 22 July Commission. Based on the empirical evidence examined in this thesis, I would argue the actual crisis coordination between Nordre Buskerud police and Delta was significantly hampered first and foremost by two factors: i) the change of meeting point, and, ii) the boats that were overloaded. Regarding the former, within a time span of three to four minutes (approximately 17:57-18:01) there were many processes that coincided and consequently reduced the level of shared situational awareness radically. The latter point also illustrates the importance of timing (discussed below). New streams of police personnel entered the operation (the Delta units and P4), which subsequently triggered a surge of information streams passing through an increased number of channels, of which some were "locked". The arrival of Delta also reinforced the need for boats. Simultaneously, observations of youths swimming away from the island were reported on the police radio for the first time, which further reinforced the need for boats. An immediate consequence of these aforementioned processes coinciding was great confusion and uncertainty about the location of the meeting point, which was ultimately changed. Furthermore, Delta was still unsure which of the islands in the lake was Utøya, while the two police officers in the police boat were unaware that the meeting point had changed.

The boarding of the police boat and subsequent boarding of the first civilian boat, which both ended in overloading the boats, slowed the police response by approximately seven to ten minutes.[147] It is puzzling why this happened given that these were highly trained police personnel, among the best

[147] According to the 22 July Commission, the Nordre Buskerud police could have arrived at the island at 18:16 if the initial plan of the Task Force Commander had been implemented without any interference or obstacles (NOU, 2012, p. 125). According to the internal evaluation by the Nordre Buskerud police, the police boat could have been at the island with seven to eight police officers at approximately 18:19 if it had not halted (Nordre Buskerud Politidistrikt, 2011, p. 104).

trained in the country. And, they managed to make similar mistakes twice in a row. Moreover, they were all present at the same location and communication challenges related to technology were thus not an issue. Based on the data material I have it is difficult to draw clear conclusions, but I will briefly mention two factors that can have played a role. Although Delta spends fifty percent of their working hours on training and exercises, it could be that a scenario where they were dependent on boats from local police was something they rarely trained on. If so, the particular setting with boarding a police boat they were unfamiliar with might have been a scenario on which they had not developed manifested practices about what to do. Second, it may be that the police officers in the heat of the moment did not think about the fact that their total weight by far exceeded their body weight due to the heavy armour, weapons and gear they were carrying.

The importance of timing

The analysis of the police operation Utøya elucidates the role of timing as an important temporal logic in crisis coordination. At what point in time directive actions to mobilize and dispatch capacities were taken, and at what time the police personnel were coupled with what type of information, had a significant impact on the coordination of police operation Utøya.

The *timing of the directive actions* taken became pivotal when 22/7 changed from being a singular crisis to a sequential crisis. For example, neither the Søndre Buskerud nor the Nordre Buskerud police took any measures to mobilize in response to the bomb explosion in Oslo. At the national level, time passed before the POD took any action, and the actions taken were primarily directed towards one police district at a time rather than joint commands and orders to all police districts. The first police unit dispatched towards Utøya was not from the Nordre Buskerud police, but a Delta unit, because Delta was already mobilizing when it received the first emergency calls from Utøya.

A related example is the lack of relevant helicopter assistance at the time when Delta was reorganizing its units. Had the police helicopter been mobilized at an earlier point it could have given Delta and the Nordre Buskerud police an overview of the island from the air and, thus, potentially have given vital

information on the probable number of perpetrators and their current location. In a similar vein, had Bell helicopters from the 720-squadron at Rygge been airborne at an earlier point they could have been used in the police operation Utøya.

The *timing of information-couplings* was also an important factor. A quintessential example relates to the (lack of) efforts to mobilize more boats by the Nordre Buskerud police during the first approximately 30 minutes of the police operation – an issue that was subject to much public debate and criticism in the aftermath of the crisis. First, during this time span those in command at the OC and the operative level in Nordre Buskerud police had no confirmed information that Delta was already on its way.[148] Second, no one in the Nordre Buskerud police, or anyone else for that matter, knew that the police boat would get overloaded and eventually halt out on the lake. Third, neither did anyone in the Nordre Buskerud police know, at the time, that there were many private boats available at Utvika camping approximately 500 metres north of Utvika pier mainland. The first time P1 reported observing a boat in the lake was at 17:56, and 18:06 was the first time the OC received a call from someone at Utvika camping offering a boat to the police if needed.[149] Fourth, it was communicated twice on the Nordre Buskerud police radio that the local FRS had been mobilized and was on its way with its boat. Fifth, it is questionable when those at the Nordre Buskerud OC comprehended the magnitude of what was going on at Utøya. What they knew from early on however, was: that there was a serious shooting situation at Utøya; that they had dispatched seven police personnel and the police boat (registered for 10 persons) towards the island; and, they had reason to believe the FRS was on its way with its boat.

In sum, I contend that those in command in the Nordre Buskerud police did not have strong incentives to be more proactive regarding mobilizing more boats during the first thirty minutes of the police operation – based on the

[148] The Nordre Buskerud commissioner received such information from the CCG Commander in the Oslo police, but this information was not coupled with those coordinating the on-going police operation in the Nordre Buskerud police, cf. 9.4.

[149] The Nordre Buskerud police, transcript of phone communication, 18:05:50.

information they were coupled with. One possible critique of this argument is that the criminal investigator did in fact inform the Operations Commander that she did not get through to the FRS. The understanding inside the OC was therefore not that the FRS was on its way, but that the OC thus far had been unsuccessful in establishing contact. As argued in 9.6, there is reason to believe that the low staffing at the OC combined with the magnitude of pending tasks and incoming calls made it hard for the Operations Commander to be more proactive in her follow-up of the information the criminal investigator gave.

Another possible critique is that the Nordre Buskerud police knew that many youths were gathered on the island and that many shots had been fired. Thus, there was good reason to believe that a need for swift evacuation of wounded victims from the island was imminent, which would require boat transport. At the same time, the extant procedures prescribed that emergency personnel other than the police were not to enter the incident scene before the police had announced the area as safe. Thus, evacuation could not start before the perpetrator(s) on the island had been detected and neutralized. And in the initial phase the police did not know how many perpetrators there were on the island or when all would be detected and neutralized, and in this sense, it was uncertain when evacuation from the island could start.

Information-couplings as coincidental

Three incidents in police operation Utøya illustrate how the direction of information streams, and when and how information-couplings occur, in crisis coordination can sometimes be rather coincidental. First, the daughter at Utøya who called her dad, who happened to be the POD's liaison that afternoon and was therefore with the Oslo CCG where Delta's liaison also was located. This information-coupling enabled that Delta from early on had first-hand information of what was going on at Utøya. If the POD's liaison had been someone else, or the daughter had not made that call, the first emergency calls the Oslo police would have received would have been the ones received and registered by the Oslo OC, which subsequently would have informed the CCG. This could have delayed Delta's response because Delta's liaison possibly would

have been less proactive if the first information he had been coupled with concerning Utøya came from a secondary, rather than a primary, source.

Second, the malfunction on the cell phone network, which redirected many of the emergency calls from Utøya to the Søndre Buskerud police rather than the Nordre Buskerud police. Had this not happened, the queue of incoming calls to Nordre Buskerud police would have been longer and it would have been even more difficult to get in contact with the Nordre Buskerud OC.

Third, the fireman who coincidentally noticed an Nordre Buskerud police unit with the police boat at full speed and sirens on passing the fire station played a role. It is possible the Fire Commander would have been less proactive regarding mobilizing and dispatching his firemen and the boat had he not been informed about the police car and the police boat passing the fire station.

A fluctuating level of shared situational awareness

The police operation Utøya highlights two points of importance concerning how collective sense-making processes change and evolve in crisis coordination processes. The first point contrasts what appears to have been an implicit assumption in some of the seminal work in the scholarship on collective sense-making in crisis. Sense-making scholars have opened the black box on how collective sense-making processes during crisis responses can turn detrimental for the existing organizational structures and produce negative outcomes (Cornelissen et al., 2014; Snook, 2002; Weick, 1990, 1993). The argument is that the mutual amplifying process between meaning and pre-existing normative structures can shift to a mutual collapse in the event of a crisis. Thus, meanings and normative structures can reinforce each other, or they can destroy each other (Weick, 1993, pp. 644–647). An implicit assumption appears to be that collective sense-making during crises are linear processes. Either, existing structures collapse, or the responders commit to one frame that is reinforced as the response unfolds.

In contrast, the collective sense-making processes in police operation Utøya fluctuated, the level of shared situational awareness shifted between lower levels and higher levels throughout the crisis response. Take for example the Nordre Buskerud police, in the initial phase the uncertainty was pervasive.

Moreover, the OC was loosely coupled with the operative level and incapable of directing and monitoring the operative police units because it was overloaded with tasks. Consequently, the level of shared situational awareness was low in the initial phase of the operation. This changed with the arrival and proactive response by the Task Force Commander. He took the command of the operative units, enacted a command structure, gave orders and delegated tasks, which helped to raise the level of shared situational awareness.[150] Then, ten minutes later, the level dropped radically due to several processes coinciding, including new streams of police personnel being coupled to the operation, surge in information streams and an increased number of channels on which the information was shared. The level remained low until the operative personnel were jointly located at the new meeting point and subsequently started boarding the police boats and civilian boats.

The second point is that multiple collective sense-making processes took place on different locations and via different channels simultaneously: in the OC, in the police cars, in the police boats, on the Nordre Buskerud police radio, on Delta's radio and between cellular phones. With the arrival of the seven Delta units and P4, the number of locations and channels where efforts of collective sense-making were made swiftly increased, and thus made it harder to create some level of shared situational awareness, because there was no common information sharing platform and the pre-existing collective knowledge across the police districts had significant limitations. Furthermore, simultaneously as they were trying to increase the level of shared situational awareness, they were occupied with other tasks.

Self-organization the panacea for police operation Utøya?

Many off-duty police officers in the Nordre Buskerud police and adjacent police districts called in to their respective OCs offering their assistance. Some simply

[150] His initial plan was to get P3 to *Vanførehjemmet* where they would launch the boat. Then together with two of the police officers from P3 (the last would drive on with the police car), the plan was to drive towards Utøya pier mainland and pick up P1 before heading towards Utøya (Nordre Buskerud Politidistrikt, 2011, p. 40). This plan never materialized because the crisis setting changed in the subsequent minutes, which I will return to in 9.5.

went to their respective police stations, while the two police officers in Modum drove directly to Utøya, arriving only minutes after the perpetrator was arrested, even though they became aware that it was a shooting situation at Utøya approximately 35 minutes later than the three police districts. The local residents and camping tourists organized a spontaneous rescue operation on their own initiative. This begs the question if coordination by self-organization is the panacea for the coordination challenges that emerged in the police operation Utøya.

A brief and tentative answer is yes and no. Yes, because self-organization is efficient time-wise. No, because it is hard to visualize the police operation without any one in command taking directive action. In the civilian rescue operation, there was no need for someone directing the coordination because they were all located at the same place and they had immediate access to their own boats by the pier at the camping resort. Moreover, they had a visual on the problems that needed handling – the youths swimming in the lake, fleeing for their lives. Thus, there were no need to coordinate information streams, personnel or other capacities – it was all there, tangible and visible. The "only" thing they had to do was to board their boats and approach the swimming youths, which many of the civilians courageously did.

In contrast, the police had to be mobilized from many different locations, boats had to be mobilized from other organizations, and their primary target was mobile and lethal. Thus, information streams, personnel and boats had to be mobilized and coordinated and caution was necessary. The balance between taking necessary cautionary measures and at the same time being proactive is an integral dilemma police commanders and personnel face in any sharp operation.

A relevant reference can here be made to some of the lessons learned from the intense manhunt for two suspects upon the Boston Marathon bombing. The manhunt started three days after the bombing when the two suspects (who were the terrorists behind the bombing) shot down two police officers. Leonard et al. concluded that in some cases of the police operations "self-deployment and out-of-policy initiative were undoubtedly to good effect; in other cases, they created dangerous situations that had to be defused". The authors elaborate by arguing

that "in tactical situations definitive and authoritative *command* is an essential resource. Someone needs to be 'in charge' – and those present need to recognize who that is and to accept it – or grave and unnecessary danger can be created for responders present at the scene, civilians nearby, and suspects" (Leonard, Cole, Howitt, & Heymann, 2014, p. 38). These points were also highly present in police operation Utøya where the police did not know the number of perpetrators, and there were many civilians in the vicinity of the island.

That being said, the case of the two off-duty police officers raises an interesting policy-relevant question of how police officers should mobilize in such situations. If off-duty police officers have access to police radio and the PO-log of the affected police district they could potentially retrieve information about the meeting point from one of these sources. Once coupled with this information they could drive directly to the meeting point and report themselves for service to those in command present at the meeting point. An alternative is to use some form of unified message system (UMS) for mass-mobilization. With UMS many police officers can be mobilized simultaneously. However, these points do not eliminate the challenges of making sense of what is going on and finding an appropriate and sufficiently safe meeting point, which are pervasive challenges in the initial phase of any crisis. Hence, there is not *one* general panacea to the question of coordinating the mobilization of capacities in the event of crises.

9.9 Conclusion

In this chapter I have argued that although the directive actions taken to mobilize and dispatch capacities differed in how responsive they were, all the directive actions can be conceptualized as routinized actions. Given their respective roles and the information they were coupled with and the timing of these information-couplings, the directive actions were in accordance with pre-existing structures and practices.

As for the coordination, the main challenge was inter-organizational coordination (rather than intra-organizational), coordinating between the OCs

and across organizational and sectoral boundaries. Significant limitations in the communication technology hampered the inter-organizational coordination. I argue, however, this is only part of the explanation. When contact was established, the dialogues often ended with one of the participants having important questions unanswered, because inter-organizational crisis coordination was a new situation for many of those involved, which intensified the uncertainty of the situation.

Lack of coordination was sometimes compensated by proactive action by subordinate officers, most notably the Task Force Commander in the Nordre Buskerud police and the Fire Commander in the local FRS. They were proactive and enacted a command structure in the absence of orders and requests from the OC and the 110-central respectively.

The timing of information-couplings played a significant role. One prominent example is the seemingly reactive response by the Nordre Buskerud police to mobilize more boats. I have argued that their actions on this point are understandable when taking into account what information they were coupled with at what time, combined with the poor problem-fit at the OC.

EXPLANATORY ANALYSIS

10 Analysis. Coordination revisited.

10.1 Introduction

In this chapter I provide an overall explanatory analysis of the six empirical chapters. How was the in-crisis coordination on 22/7 conditioned by pre-crisis coordination? To what extent can the three conventional perspectives – coordination by design, evolutionary practice, emergence respectively – explain the patterns and dynamics I observe in the empirical material? And how did the multidimensional role of time come into play, both in the actual crisis coordination, but also in our understanding of police crisis coordination on 22/7? These questions form a backdrop for the analysis in this chapter. I argue that the in-crisis coordination was significantly hampered by limitations in the pre-crisis coordination structures and practices. Moreover, I argue that the conventional perspectives on coordination all were significant parts of the story. However, I contend that taking into account the multidimensional role of time yields a more elaborate explanation of the actual crisis coordination by the police on 22/7.

In the next section, I briefly revisit the expectations outlined in the theory chapter (10.2). Then, I show how the three perspectives on coordination were parts of the story, but at the same time argue that they provide insufficient explanations (10.3). Then, in the final sub-chapter I revisit my theoretical argument on the importance of time, which also elucidates how the expectations materialised in the empirical analysis (10.4).

10.2 Reviewing the expectations

The sub-chapter is structured in accordance with how the expectations were organized in 2.7. First, I revisit the expectations on directive actions, then information sharing, and finally shared situational awareness.

10.2.1 Directive actions and the risk of coordination underlap

Excessive overlap. I expected that excessive overlaps in the organizational design (functional or geographical specialization) could create a reactive response due to confusion and uncertainty about whose responsibility it was to take the command. The empirical analysis did not reveal clear signs of reactive

directive actions due to overlap in the organizational design. One important reason is that the Norwegian police is generalist-oriented in its functional specialization, which reduces the risk of overlap.

I also expected that any underlap in the organizational design (functional or geographical specialization) would create a reactive response due to either unawareness of the problem that needs to be handled because no one has it as its primary responsibility, or uncertainty on who should take the lead, because no one has the problem as its primary responsibility.

Underlap. On 22/7 there were de facto two inter-related cases of coordination challenges due to underlap: i) what police districts were supposed to do if an adjacent police district suffered a terrorist attack; ii) what directive actions, if any, the POD was supposed to take if there had been a disruptive, extraordinary incident, which exceeded the capacity of the affected police district and/or spanned police district borders. Common for both issues is that they were addressed in the organizational design, but they were ambiguous (cf. 4.5 and 8.4). Moreover, these points in the guidelines had rarely been exercised and rarely, if ever, been tested in response to a real-life incident (cf. 4.9). Thus, there were latent weaknesses in the organizational design, what I call designed incapacities. In other words, there was a latent underlap in the organizational design related to the geographical specialisation, which prior to 22/7 had not been addressed and followed-up sufficiently by anyone with the authority to take appropriate action. The full-scale exercises initiated by the POD conducted annually since 2007 were a step in the right direction, but it was too little, too late.

What in practice happened on 22/7 after the bomb explosion was that an underlap in the command structure emerged. The crisis preparedness guidelines prescribed that affected police districts could request neighbor assistance, and that the POD could take coordinating actions towards the police districts in the event of an extraordinary incident. The Oslo CCG was under the impression that the POD would coordinate the mobilization of police capacities from other police districts, while the POD seemed incapable of taking such a role. Consequently, the police districts proximate to Oslo received no requests for

neighbor assistance from the Oslo police and few received any requests from the POD. Then it was left to those in command in the respective police districts to take directive action or not, which some did, and others did not (cf. chapter 8).

A similar pattern emerged when the police districts started receiving reports about shooting at Utøya. The understaffed Nordre Buskerud OC was overloaded with tasks and had thus limited capacity to send requests for neighbor assistance. The POD was not in a situation to coordinate the mobilization: first, for the reasons already touched upon in the previous paragraphs; second, because it took time before information about what was going on reached the POD. As the shooting incident at Utøya unfolded, adjacent police districts were unsure whether to assist or not. In a similar vein, a coordination underlap emerged regarding the mobilization of the local Fire and Rescue Service (FRS) and its search and rescue boat. The coordination underlap emerged because no successful directive actions were taken, either by those in command at the Nordre Buskerud police, or by the 110-central. The unsuccessful action by the former was due to a combination of a poor problem-fit and a malfunctioning keyboard at the Operations Center. The contingency plans of the 110-central said nothing on what to do in the event of "shooting in progress"-incidents, and the pre-existing practice was to await a request from the police.

10.2.2 Information sharing

Significant limitations in the pre-crisis coordination capacities

Joint standards across boundaries. I expected that the more jointly standardized the guidelines and technology for information sharing are across the geographical and functional boundaries, the easier it will be to share information swiftly. The lack of well-functioning channels for information sharing between the operations centers became detrimental on 22/7. The consequence was that the only way to share information swiftly was by one-to-one oral communication. As in the "telephone game", information was lost and transformed as messages were passed on across hierarchical levels and organizational boundaries. The fact that the police radio network (until 2010) and the PO-log system were restricted to the respective police districts elucidates

how the decentralized silo structure worked as a barrier for inter-organizational crisis coordination.

Information processing capacity. I also expected that the higher the information processing capacity (IPC) in the organization, or network of organizations, the more information-couplings would occur. The empirical evidence provided numerous examples of loose information-couplings and non-couplings, both in the Oslo Operations Center and the Nordre Buskerud Operations Center. Furthermore, the Oslo Operations Center managed to respond to about half of the incoming calls the first hour, which indicates the level of discrepancy between the IPC of the Oslo Operation Center and the volume and intensity of the incoming information streams (cf. 6.2). The IPC at the Nordre Buskerud OC was significantly less (one Operations Commander and one criminal investigator operating as operator) and there is therefore reason to believe its response rate was lower than the Oslo Operations Center.[151]

In-crisis coordination

Attention and access. Overall, the information sharing was characterized by loose couplings and non-couplings, and more matches than mismatches. By this I mean that the coordination challenges were more related to people not being coupled with the information, only loosely coupled or coupled at the "wrong" time than it was that information was directed to the "wrong" people.

This is in line with the expectation that those who get coupled with information streams are those who have access to the streams and have sufficient attention directed towards the channel when the information passes. There were numerous loose couplings, such as the Oslo OC's handling of the car-tip. The overload of pending tasks and incoming information streams all called for attention from the operators, which meant they had to prioritize where to direct their attention. Moreover, the "jumping" screen in the PO-log aggravated the challenge of getting coupled with information registered in the PO-log. Moreover, the bounded PO-log systems and police radios (cf. previous

[151] The system the Nordre Buskerud Operation Center had did not allow for retrieving statistics on the response rate on incoming calls.

paragraph) did not give access to information in one police district for police personnel from other police districts, and thus was a barrier for information sharing.

Information sharing takes time

Formal distance. In the theory chapter, I expected that the more formally distanced a person, or organizational unit, was from the incident scene(s), the longer it would take to get coupled with information about what is going on. Evidence from the empirical analysis suggests that information sharing across hierarchical levels can take time, which is a scarce resource in crisis responses. The POD was a prominent example. Because the POD is at the national level it was distanced formally far away from the incident scenes. It took time before the POD was coupled with relevant information. Because the POD had no access to the information received and registered at the subordinate bodies, it was dependent on getting in contact with those in command at the subordinate bodies, which proved difficult on 22/7.

10.2.3 Shared situational awareness

Pre-crisis coordination, lack of collective knowledge. The prevalent non-coupling and loose information-couplings made it challenging to enact a shared situational awareness. The challenge was reinforced by the lack of joint exercises across the geographical boundaries, which resulted in limited collective knowledge across the police districts. I have argued that the lack of joint experiences and collective knowledge between the Operations Centers induced the uncertainty among the Operations Commanders and the operators about what to do next when communicating with other Operation Centers. This confirms the expectation outlined in the theory chapter that the more collective knowledge there is across geographical and functional boundaries, the easier it will be to establish some level of shared situational awareness.

In-crisis coordination, lack of collective sense-making. Building on the collective sense-making in crisis literature I also expected that the more explicit the collective sense-making processes are, the more likely it is the responders will develop a high level of shared situational awareness. As the empirical

analysis demonstrated, the collective sense-making was often implicit rather than explicit. Implicit encoding and decoding of shared information across organizations in a silo structure is prone to misunderstandings and misinterpretations because they have limited collective knowledge and common ground to draw on. This was evident in the empirical analysis. Information that was shared was not made actionable and recipients of information were not given sufficient time to vocalize their reflections. Combined, these two factors made the collective sense-making processes less explicit and made it more difficult to develop and maintain a high level of shared situational awareness. This was prevalent both in how the police handled and distributed the car-tip (cf. chapter 7) and in the police operation Utøya (cf. chapter 9). Given the pervasive urgency in crisis settings, there is always a trade-off between taking (more) time to vocalize and reflect on each other's assessments or to proceed with the next steps in the operation (cf. Wolbers & Boersma, 2013). There is not one uniform answer to this question. The point is rather that it is important to be attentive to this trade off. Moreover, there is reason to believe that the more experienced you are, the more competent you are to handle the trade-off appropriately.

10.3 Design, evolutionary practices and emergence revisited

In the theory chapter three types of explanations on how coordination is enabled were discussed: coordination by design, coordination as evolutionary practices and coordination as emergent actions. To what extent can these conventional explanations account for the empirical findings?

To be sure, organizational *design* was a major part of the story. The decentralized structure of the police organized into highly autonomous police districts was a main reason why most of the efforts to build crisis coordination capacity took place within the respective police districts rather than across. Moreover, a main reason for the poor problem-fit in the crisis coordination was the low and inadequate staffing at the OCs and the hard-to-reach air transport capacities. And, in line with the design perspective, the organizational structures

did enable crisis coordination by outlining how the hierarchical structure was supposed to be by assigning responsibilities and tasks to the respective levels and roles. However, there are three central questions derived from the empirical analysis that the design perspective is unable to account for: i) why the shift from normal structure to CCG structure did not reinforce the crisis coordination capacity in the Oslo police; ii) why the POD responded reactively; and, iii) why inter-organizational crisis coordination was a major challenge for the OCs? In all three examples, crisis preparedness guidelines that prescribed what the respective actors were supposed to do in the case of an extraordinary incident, like for example a terrorist attack, had existed for at least four years.[152] According to the design perspective, substantial coordination challenges would therefore not emerge because relevant guidelines existed prescribing what the incumbents were supposed to do.

Two comments can be made in response to this critique. First, the limited functionality of the channels for information sharing is an integral part of the answer to all three questions. Thus, given that the channels are perceived as part of the organizational design, the design perspective can account for parts of the coordination challenges that emerged. This explanation is only one part of the story however because coordination challenges persisted even when contact was established via one of the available channels. Second, in chapter four I argued that the crisis preparedness guidelines could be assessed as ambiguous on some points regarding the role of the POD, and the transition from normal structure to CCG structure in the police districts, when a crisis occurs. Hence, advocates of the design perspective could argue that the coordination challenges experienced by the POD and in the Oslo CCG and OC can be explained by the ambiguities in the design. Yet, if there were ambiguities in the crisis preparedness guidelines,

[152] I write "at least" because I know that prescriptions for all three listed examples existed in the guidelines of 2007 (Politidirektoratet, 2007). Prior to the guidelines of 2007, there existed handbooks and guidelines with prescriptions on inter alia the organizing of the CCG (cf. Rosø & Torkildsen, 2015). I have however not consulted these documents and can therefore not state with certainty when the different elements were introduced for the first time.

and these had existed for at least four years, why had there not been made changes in the organizational design?

Addressing the *evolutionary practice perspective*, pre-existing practices also mattered for the directive actions taken (and not) and the crisis coordination by the police on 22/7. Moreover, the evolutionary practice perspective is an important supplement to the design perspective in explaining the role of the pre-crisis coordination phase. The aforementioned ambiguities in the crisis preparedness guidelines that existed in the years prior to 22/7 had persisted because they were very rarely practiced. Due to the limited relevant practice, these ambiguities in the organizational design were seldom experienced and received little attention. The limited training and exercises of those working in the OCs and those carrying out CCG functions gave them few chances to enact the existing crisis coordination structures in real working situations. Consequently, they did not develop relevant "cause maps" (Weick, 1979), they had few opportunities to develop and maintain crisis coordination practices, and were therefore more likely to enact actions that not were performance-relevant on 22/7. A prominent example is the confusion and unanswered questions that emerged from the dialogues in the inter-organizational coordination, for example between the OCs in the police operation Utøya or between the Oslo OC and Kripos when forwarding the "car-tip". All the dialogues in the mentioned examples resulted in a poor level of shared situational awareness.

The analysis also provides clear indications of *emergence*. The emergent mobilization in Oslo, police officers reporting in on own initiative, or simply rushing directly to the incident scene like the two police officers in police operation Utøya. In a similar vein, the spontaneous rescue operation by proactive civilians that emerged at Utøya. There were also examples of emergent improvisation (adaptive and creative). For example, the Task Force Commander in Nordre Buskerud police who took command and enacted a structure in the absence of the OC that was understaffed and overloaded with tasks. Another example is the Fire Commander in the local FRS who proactively mobilized his team and their SAR boat even though they had not received any request from their 110-central. These examples emerged as a consequence of the disruptive

crisis setting. However, as I asserted in the theory chapter, the emergence perspective does not offer a satisfactory account of why there is variation in the actions, interactions and responses that emerge during a crisis response. As this study of the crisis coordination by the police on 22/7 exemplifies and illustrates, some responded proactively while others responded reactively, some enacted routinized actions while others improvised.

Building on the literature on improvisation in organizations I have argued that the sources of routinized actions and emergent improvisation in crisis coordination is found in the pre-existing crisis coordination structures and practices. Thus, to better understand the dynamics of crisis coordination in an actual crisis we need to also examine the pre-crisis coordination, the efforts made to build crisis coordination capacity in the years preceding the crisis that is under scrutiny. The empirical analysis demonstrated that building crisis coordination capacities in the police was not a highly prioritized issue during the 2000s by the Norwegian police. Such analysis was necessary for a more elaborate understanding of why the police responded as they did. However, to integrate the three perspectives on coordination and more importantly, to account for the dynamics of the actual crisis coordination by the police on 22/7, we need to take into account the multidimensional role of time.

10.4 Revisiting the importance of time

In this thesis I have argued that in order to enhance our understanding of how and why the police coordinated its response to 22/7 the way it did, we need to include the multidimensional role of time in crisis coordination: time as history, timing, urgency; time as sequential logic and the interplay between chronological time and kairotic time. In the following, I elaborate my argument by elucidating how the five dimensions of time are significant to understand and explain the directive actions taken, and the crisis coordination, by the police in response to 22/7. The sequential logic is not discussed in an own section but forms an integral part of the sections on time as timing and urgency.

In brief, an important part of the explanation why the police coordinated its response to 22/7 as it did is the timing of (directive) actions and couplings: *when* the directive actions and actions during the crisis coordination were taken; *when* information about problems and capacities got coupled to police personnel; and, *when* police capacities got coupled with the problem(s) they were expected to handle. Thus, answering the "why"-question of crisis coordination is not only a matter of examining and taking into account the "what" and the "how", we also need to include the "when". My emphasis on timing does, however, not imply that the crisis coordination by the police on 22/7 was solely driven by chance. On the contrary, I argue that the timing of when directive actions were taken, and couplings occurred was conditioned by pre-existing crisis coordination structures and practices (cf. time as history). Finally, I contend that a probable reason why this thesis comes to different conclusions than extant accounts on the police and 22/7, is related to methodology, where the interplay between chronological time and kairotic time, and how we handle this interplay methodologically are important elements.

10.4.1 History: Building crisis coordination capacity not a political priority

I have argued that directive actions to enable crisis coordination, and the subsequent crisis coordination, is conditioned by the pre-existing crisis coordination structures and practices (pre-crisis coordination) regardless of whether the actions taken are routinized or improvised. The pre-crisis coordination can constrain, and it can enable, the coordination in an actual crisis response.

The evidence in the analysis demonstrated that pre-crisis coordination significantly constrained the possibilities for enacting swift mobilization, and a coordinated police response, on 22/7. Put differently, the on-duty police officers had a difficult starting point: the channels for inter-organizational information sharing had severe limitations, oral communication was in practice often the only viable option; the reachability of police capacities was poor, level of staffing was low, air transport capacities were hard to reach and there was no pre-fixed response time on police personnel with specialized competence (except Delta);

the crisis preparedness guidelines were scant and ambiguous regarding how inter-organizational crisis coordination was supposed to be practiced and the actual practicing of inter-organizational crisis coordination was limited. Why did the Norwegian police exhibit these significant weaknesses in pre-crisis coordination?

I have argued that two main and interrelated explanations are: i) the historical development of the Norwegian police as characterized by a decentralized silo structure, and ii) the characteristics of the political steering of the police.

In chapters 4 and 5 I argued that the development of crisis preparedness and coordination capacities in the Norwegian police has happened within a *decentralized silo structure*, i.e. many silos (police districts) with few horizontal structures and de facto no equivalent to the local Operation Centers at the national level. Within the general priorities and budgetary allotments exerted by the Ministry of Justice, it has been up to the local commissioners to make priorities "within own turf". The organizing and development of operative police work and practices has predominantly been developed in the local police districts. The police districts were expected to handle all police matters within own jurisdiction, including extraordinary incidents.

The impression of a decentralized silo-organized police was further reinforced by the material structure of the communication technology of the police districts. Their operative information sharing system (the PO-log) was in practice delimited to each police district. The same was the case for the police radio networks until 2010, when the new digital emergency response communication system (ICCS) was implemented, which included the Oslo police and five other police districts.

A consequence of the decentralized silo structure was that horizontal organizing between the police districts remained largely a blind spot. Inter-organizational crisis coordination between the police districts prior to 22/7 was based on one-to-one interaction via telephone communication. Thus, when the OCs in the police districts adjacent Oslo and the Nordre Buskerud police district realized their assistance was needed they were unsure about what to do, because

it was a novel situation for them. They were unsure about what directive actions to take, if any, to couple their capacities to the problems that needed to be handled, and they were unsure about how to coordinate their actions with the other OCs. This was illustrated inter alia by the mixed response by other police districts to the bomb explosion (cf. chapter 8), and the unanswered questions the operators had upon communicating across police districts in the police operation Utøya (cf. chapter 9). Those working in the operations centers lacked pre-existing structures and practices to guide their actions, because the practice and development of crisis coordination had happened mainly within the respective police districts. This made it unclear what making a routinized action would imply regarding inter-organizational crisis coordination, and made it hard to be creative and improvise, given improvisation is largely about reworking and drawing on pre-existing materials, design and capacities (cf. 2.3.4).

The detailed *political steering* of the POD, and its subordinate bodies, by the Ministry of Justice (MoJ) in the 2000s was biased towards other issues than crisis preparedness, which affected the priorities the POD, and subsequently the local commissioners, made. Moreover, there has been a long-standing bipartisan consensus that the role of the police should be grounded in values such as decentralization, anchoring the police work in the local communities and having a generalist police (cf. 4.3). Furthermore, prior to 22/7, there were few, if any, crisis incidents that put the inter-organizational crisis coordination capacity of the local police districts and POD to a tough test. A consequence of the political steering and the absence of external shocks was that the police were not exposed to strong external pressures to prioritize building crisis coordination capacity. In contrast, the police experienced strong political signals to prioritize other issues such as crime prevention and criminal investigation and prosecution. Therefore, it was largely up to the POD and the local commissioners to find time and money within the annual budgets to invest in building crisis coordination capacity. Some measures were taken, for instance the annual full-scale exercise introduced in 2007 and the national crisis preparedness guidelines implemented the same year, but they were too little and too late.

10.4.2 The "when": The timing of couplings

The timing of couplings – what/who are coupled when – is essential to understanding the dynamics of the crisis coordination by the police on 22/7: The timing of information-couplings, who were coupled with what information when, and the timing of problem-couplings, who/what were coupled to handle what problems when. More generally, I assert that focusing on the timing of couplings in studies of crisis coordination enhances our understanding of why actions were taken when they were by the respective actors, and why those actions were chosen instead of alternative actions. The empirical analysis provide interesting evidence on what factors can hamper swift information sharing during crisis responses, and how problems with information-sharing subsequently affect the timing of couplings and the crisis coordination.

The analysis of how the Oslo police handled the information about the "car-tip", which it received only minutes after the bomb explosion, is a quintessential example of how the speed of information streams through an organization may vary, of how one stream may transform into multiple streams, and, of how the content of the initial information stream may change. The initial information stream that contained the "car-tip", i.e. the message registered by the switchboard assistant who talked to the eyewitness, transformed into six different information streams during a time span of thirteen minutes. Only two of the six recipients of the respective information streams took subsequent action that was directly related to the message they had received. One of the two awaited 35 minutes before any follow-up action was taken.

The explanation is twofold. Important parts of the information had been lost or changed along the way. One consequence was that the importance of the information in the six subsequent information-couplings was less evident than in the initial information stream. Also, in the case of the Incident Commander and Delta who were located at the government complex, they assessed it as too late to initiate any relevant measures from their command.

How the meeting point for the police in police operation Utøya got changed due to a misunderstanding illustrates some potential risks of information sharing on "locked" channels. The misunderstanding occurred

during a dialogue the Nordre Buskerud Operations Commander had with one of the Delta officers. Because they communicated via telephones, no one else had access to the information they exchanged and thus no chance to correct the misunderstanding that emerged. In the subsequent minutes, uncertainty was expressed by police officers on the police radio concerning what the meeting point was. The Nordre Buskerud Task Force Commander was not coupled to the dialogue on the telephone, nor the subsequent confusion expressed on the police radio, because the police boat he was sailing at the time made too much noise. It is likely the Task Force Commander would have intervened had he been coupled to any of the aforementioned information streams, because he was the one who enacted a command structure and a plan for the police operation in the initial phase.

The empirical evidence from the police operation Utøya also illustrates how shared situational awareness can be inaccurate and change during crisis coordination. Initially, the Nordre Buskerud police had information of shooting at Utøya, that the Nordre Buskerud police boat had been dispatched and that the local FRS had been alerted and was on its way with its SAR boat – the latter turned out to be inaccurate. What the Nordre Buskerud police did not have information about at the time was: i) that Delta already had been dispatched and would soon be at Utøya; ii) that there was a camping resort with many civilian boats in the immediate vicinity of Utøya; iii) that the dispatched police boat would be overloaded and eventually halt; iv) the magnitude of the shooting that unfolded at Utøya – the reports that the Nordre Buskerud police received indicated unquestionably that there was a dramatic situation, but not necessarily that it was the deliberate and ruthless shooting massacre that we know in retrospect that it was. At later points in the police operation the four aforementioned points became clear to the Nordre Buskerud police and an awareness of the need to mobilize more boats emerged. In other words, the shared situational awareness of the need for boats changed because the Nordre Buskerud police was coupled with new information streams as the police operation unfolded, which helps explain the reactive mobilization of boats by the Nordre Buskerud police.

The analysis also demonstrates how information-coupling is a necessary condition for mobilization. Consequently, the timing of the initial information-coupling is pivotal for the responsiveness of the subsequent mobilization. The reactive response by some of the police districts upon the bomb explosion epitomizes this point. The only information streams reporting about the bomb explosion that the police districts (except the Oslo police) were coupled with in the initial phase came from the media. The police districts were not coupled with requests from the Oslo police or operative orders or verified information from the national level. And, when information and orders eventually came from the national level, they were sent via the national alarm system, which malfunctioned on 22/7.

10.4.3 Urgency: The dilemmas of when to act and what to do

The need for swift action combined with the pervasive uncertainty put the police officers under stress and they were prevalently confronted with the dilemma: when to initiate (what type of) action? For instance, the bomb explosion evidently triggered a need to mobilize, but by whom? In the words of the Incident Commander, it was time to "push the very biggest button". Those in command in the adjacent police districts did however not get this message, nor did they get any similar signals from the Oslo police or the POD. It was evident from the live news coverage that there had been an explosion in the government complex, but what had actually happened? And was the assistance of the adjacent police districts needed? The uncertainty was pervasive, and further intensified by the lack of pre-existing structures or practices that could give guidance on what they were supposed to do. More specifically, what, if any, capacities they were supposed to mobilize, when? The response by those in command in the police districts in vicinity of Oslo differed, some responded proactively, while others were more reactive.

Another example of the "when to"-dilemma was when to end an on-going conversation to free oneself for handling pending tasks. The dilemma was prevalent in the inter-organizational information-sharing between the OCs during the police operation Utøya. The dialogues were brief, and at the end of the dialogues one or both of the operators/Operations Commanders was still

unsure how to interpret and decode the information he/she had received. One important explanatory factor was the lack of relevant practice. There is also good reason to believe the sense of urgency played a role. The OCs were overloaded with pending tasks and the queue of incoming emergency calls exceeded their capacity. Thus, it was important they executed the pending tasks swiftly, including the dialogues with other OCs. However, as the analysis demonstrated, ending the dialogues without making time for the recipient to explicate how he/she interpreted the received information often resulted in unanswered questions.

10.4.4 Time as present versus time as past: A prospective approach

Time is characterized by an interplay between time as present, happening now, and time as past. The interplay between chronological time measured in mechanical intervals, and kairotic time, which "jumps and slows down, omits long periods and dwells on others" (Czarniawska, 2004, p. 775). A basic, but still important, point is that no one knows an important event when it is taking place. Events are made important or unimportant (Czarniawska, 2004; Taleb, 2010).

I contend that employing a prospective research strategy is a different approach to the interplay between time as chronological and kairotic than existing accounts on 22/7. This thesis has had time as locus and thus analyzed the actions and interactions on 22/7 in real time and situated in its broader historical-institutional setting. In contrast, I contend that existing accounts have put more emphasis on what could have been done differently based on what we know in hindsight and that this is an important reason why this thesis comes to different conclusions than extant accounts and assessments of why the police responded as they did on 22/7. In contrast to extant accounts, which assess the actions and the coordination by the police as a failure, I assert that the actions taken were deemed reasonable for the police officers given their preconceptions of the roles they had in the organization and their designated role in the actual operation combined with their physical location and the information they were coupled with at the time they enacted their actions.

I have strived to mitigate the risk of hindsight bias by mapping what the different actors had of information at different points in time, and I have construed the actions taken on 22/7 as situated in a broader historical-institutional context (Pierson, 2004; Pollitt, 2008; Vaughan, 1998). I would argue that employing a prospective strategy to the study of crisis coordination and crisis management more generally enables a crisis-induced learning process focused on what was *practically feasible* in the in-crisis coordination, which I would argue, should be distinguished from what was *theoretically possible.* By practically feasible I mean what there are reasonable grounds to expect that the police could have done given the pre-existing crisis coordination structures and practices and based on the information they were coupled with at the time. What was theoretically possible is simply the ideal model of the crisis response based on everything we know in retrospect, i.e. how the process could have unfolded if the optimal actions had been made at every point in the process.

By combining a prospective research strategy and a multiple streams framework that takes into account the multidimensional role of crisis coordination, I have demonstrated that what was practically feasible in the police response was severely hampered by weaknesses in the pre-crisis coordination (cf. time as history). Moreover, I have outlined a more finely grained and nuanced account of what was practically feasible regarding the mobilization and coordination of police capacities in the first hours upon the bomb explosion by focusing on who were coupled with what information when (cf. time as timing). In the next section I outline two contrasting examples from 22/7 to elucidate why it is fruitful to distinguish between theoretically possible and practically feasible. Then, I argue that simply assessing the decisions and priorities made by the top representatives in the respective organizational and political bodies in the 2000s as a policy failure would be a fallacy. First, because it neglects how politics work, and second because it would be to focus overly on one sequence of events. I end this section by making a reflection on one of the ways this thesis differs from the report by the 22 July Commission: What we take as analytical starting points.

Theoretically possible, practically feasible: Two contrasting examples

The relevance of distinguishing between what is practically feasible and theoretically possible during a crisis response, and how the notion of time as timing is relevant in this regard, can be illustrated with two contrasting examples from 22/7: the reactive mobilization of the police helicopter upon the bomb explosion and the reactive mobilization of boats in the police operation Utøya.

It is evident it was theoretically possible for the police to enact a more proactive mobilization in both occasions. The Oslo OC could have mobilized the police helicopter immediately upon the bomb explosion, and the Nordre Buskerud OC could have dispatched some of its police units to the camping resort and it could have been more persistent in its efforts to establish contact with the 110-central. There are also good grounds to assert that it was practically feasible for the Oslo police to be more proactive in mobilizing the police helicopter. Several members of the Oslo CCG were under the impression that the police helicopter had already been mobilized. Furthermore, early on in the crisis response one of the pilots on holiday reported to his superior that he was available for duty. In contrast, it is more dubious whether it was practically feasible for the Nordre Buskerud police to enact a more proactive mobilization of boats. Firstly, the Nordre Buskerud police had in the initial phase of the police operation an inaccurate shared situational awareness. Secondly, there was a very low level of problem-fit at the Nordre Buskerud OC. Although I will not conclude that it was not practically feasible to conduct a more proactive mobilization, I contend it was far less feasible than what has been asserted in extant accounts on the issue.[153]

The two contrasting examples illustrate that it is possible (in retrospect) to theoretically construct action alternatives that probably would have been more effective than the ones that were taken. But, more importantly, the examples illustrate that action alternatives that are possible to construct in retrospect do

[153] One example is the 22 July Commission who asserted that "[T]he police did not manage to make use of the civilian boats that were available early enough" (NOU, 2012, p. 110).

not necessarily imply that these action alternatives were practically feasible at the point in time for the actor in question.

Crisis preparedness policy making in the 2000s: A failure?

Were the limited efforts to reinforce police crisis preparedness and coordination capacities in the 2000s a policy failure? I would argue that to simply conclude that this was a policy failure would be to narrate the analysis by employing an "ancestor's plot", "[A] hierarchically structured story flow (…), which looks at all the causes of a particular event from the most immediate to the most general (…) ignoring the other 'descendants' of those 'ancestor' events" (Abbott, 2007, p. 80). Thus, how crisis preparedness was prioritized in the political steering of the police must be analyzed in a broader context, not solely drawing a direct link between "crisis preparedness low on the priority list in the 2000s" to "flawed crisis response on 22/7". This is simply because little money allotted to crisis preparedness issues also means *more* money on other issues.

In their planning and annual budgeting, the politicians, MoJ, POD and the commissioners have to prioritize between many pressing issues. An important point in this regard is the multifaceted role the police are expected to take. This is particularly salient in the Norwegian case, because the Norwegian police have a vast and varied task portfolio. Two main reasons are the "integrated model" where prosecution is an integrated part of the police organization and the fact that the Norwegian police are responsible for a number of civilian tasks (cf. 4.2). An implication is that the police and its superior governmental bodies have to make tough priorities between many policy areas, which all are important, such as: youth crime, sexual violence, corruption, environmental crime, drunk driving, domestic violence, murders – and crisis preparedness. Whether to prioritize crisis preparedness or not is first and foremost decided by those controlling the annual budgets and the allotment of human and material capacities: the commissioners in the police districts, the top leadership in the POD, the Ministry of Justice, the government and ultimately the Parliament.

Prior to 22/7, Norway had hardly experienced any terrorist attacks with substantial impact, while other types of crimes were prevalent, relatively speaking. Thus, it could be argued that other crime-related issues than terrorism

were more urgent in Norway in the 2000s and it was therefore right to prioritize these issues over crisis preparedness. Following this line of argument, the political priorities made in the political steering of the police in the 2000s was not a policy failure, but stemmed from priorities that appeared reasonable at that point in time. There is no clear-cut answer to this question. My basic argument is twofold. First, the political steering of the police is about making tough priorities between different policy issues, which all are potentially important, and how these priorities are made is first and foremost a political question. Second, it is easy in hindsight to state that the police districts, POD, the MoJ, the government and the parliament should have prioritized crisis preparedness and coordination more than they actually did. Such a conclusion is however too simple, because it does not take into account the broader political dynamics of the institutional environment the police operate in. The point of my argument is not to excuse those in central positions in the years prior to 22/7, but to nuance the narrative about why they did as they did.

A reflection: From in-crisis to post-crisis

An overall argument in this thesis is that how we understand crisis coordination is dependent on our preconceptions of the interplay between chronological time and kairotic time. In the aftermath of the 22/7, a narrative on what were the critical episodes and moments in time during the crisis response gradually emerged. Thus, some episodes were made important, while others became less important (cf. Czarniawska, 2004). For instance, the story about the "yellow note" (e.g. Grinde, 2012), which referred to the "car-tip" (and was not written on a yellow note,[154]) became an important part of the story, while the police operation at TV2 where the police feared there was an undetonated bomb received little attention.

[154] The "yellow note" was a phrase used by the leader of the 22 July Commission at the first press conference when informing the media on how the police failed to swiftly follow-up the car-tip it received only minutes after the bomb explosion (cf. chapter 7). The information was written on a white notebook, not a yellow note.

In real time, the first responders had to decide what information they wanted to direct their attention to. Sometimes this resulted in not being coupled with the information that turned out to be important (in hindsight), and instead being coupled with information that turned out to be unimportant and/or inaccurate (in hindsight). An example of the former is the loose and non-couplings of the "car-tip". An example of the latter is the extensive attention that was directed at the reports about a suspicious object outside TV2 in Oslo, which subsequently led to the enactment of a large police operation that lasted over four hours.

As time passed after 22/7, and the evaluations and inquiry reports were publicised, the public gradually developed an understanding of what had happened. Most notably, the 22 July Commission gave a detailed account of what happened in the initial phase of the crisis response. In particular, the police operation Utøya was documented in detail describing the operation almost from minute to minute, supplemented with graphic illustrations such as figure 10.1.

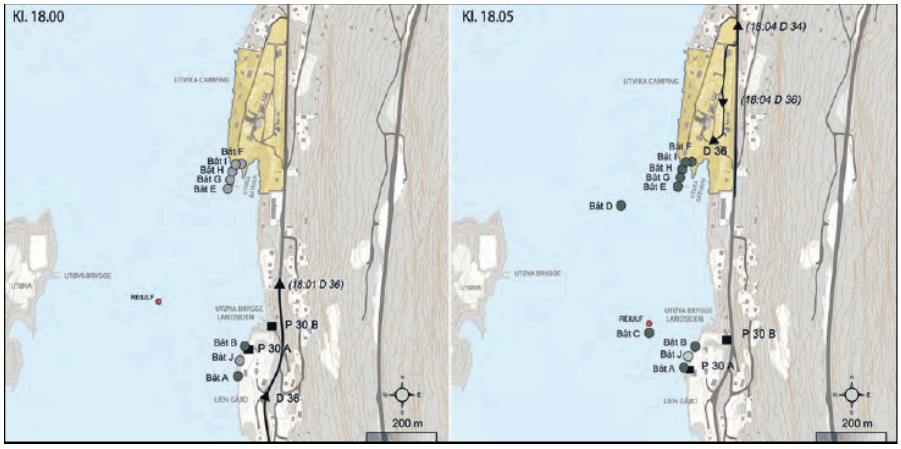

Figure 10.1: Overview of where available boats in proximity of Utøya, and police units, were located at 18:00 and 18:05.[155]

In the detailed account on figure 10.1 there are no "blind corners". The reader gains full overview of the incident scene, where the different actors and boats

[155] The illustration is taken from the 22 July Commission report (NOU, 2012, p. 135).

are located at various points in time (he circles, squares and triangles on the figure refer to boats, police officers and police units respectively). However, the boat situation depicted on figure 10.1 was unknown to everyone in the police at that moment in time. More specifically, none of the police officers were aware that there were numerous boats available at Utvika camping (the area in yellow on figure 10.1). Nor, did the Delta officers at this point in time know that the island on their left side was Utøya, their focus at this point in time was to identify and locate their meeting point and they therefore continue driving further north (cf. 9.3 and 9.4).

Presenting the analysis with figures like 10.1 is very useful to provide the reader with an overview of the situation at different points in time. However, in real time none of those involved have such a "bird's view" of the situation. They had a bounded overview. Their overview was bounded by their physical location, but also by their role in the organization, cf. humans' inclination to see what we expect to see (Nickerson, 1998).

In my presentation of the empirical analysis I have taken the respective actors' bounded overviews as analytical starting points and focused on what was practically feasible in my counterfactual analysis. In contrast, I would argue, the 22 July Commission's presentation of the empirical analysis is a mixture of a situational overview and actors' bounded overview as analytical starting point. This is in many respects understandable given that part of their task was to provide a detailed account of what happened. My point is that this can be problematic, because it can understate the limited, complex and uncertain situational awareness the respective actors had in real time. Moreover, the 22 July Commission leans more towards what was theoretically possible, rather than practically feasible, in their counterfactual analysis (see Tunby Kristiansen, 2017 for a similar argument).

The upshot of the discussion in the previous sections is that if we are not highly attentive to the interplay between chronological time and kairotic time when examining crisis coordination, there is a risk that the post-crisis assessments of the responders actions are based on a situational understanding

of the crisis that deviates significantly from the situational understandings the respective responders had in real time.

11 Conclusion

11.1 Introduction

Why did the police not mobilize more capacities more swiftly on 22/7? Why was there a lack of coordination by the police in its response to the two terrorist attacks? In this thesis I have argued that the pre-crisis coordination significantly constrained the possibilities for enacting swift mobilization, and a coordinated police response. Moreover, an important part of the explanation why the police coordinated its response to the terrorist attacks as it did is the timing of (directive) actions and couplings. Thus, answering the "why"-question of crisis coordination is not only a matter of examining and taking into account the "what" and the "how", we also need to include the "when".

I begin this concluding chapter by answering the two research questions (11.2). Then I round off this thesis by making some reflections on possible prospects for the multiple streams framework (11.3), and on lessons learned and on policy implications (11.4).

11.2 Answering the research questions

11.2.1 Reactive mobilization: Non-couplings and coordination underlap

The first research question was: *Why did not the police mobilize more capacities more swiftly on 22/7?*

The brief answer is that the mobilization was hampered by a coordination underlap. However, the underlap did not exist in the organizational design per se, but came as a result of a combination of three factors that coincided: i) the two affected police districts did not signal clear requests for assistance: The Oslo police did not request any assistance, while the requests by the Nordre Buskerud police were piecemeal and ambiguous; ii) the POD did not enact any joint order to the police districts regarding mobilization; and, as a consequence of i) and ii), iii) the other police districts were unsure whether to mobilize, and if so, what to mobilize. As demonstrated in chapter eight, some police districts mobilized,

while others did not. But why was there a coordination underlap, and why did not any of the aforementioned actors take more proactive directive action?

The coordination underlap was a result of ambiguities and voids in the existing crisis preparedness guidelines combined with limited practicing of inter-organizational crisis coordination, both vertical (between the POD and the police districts) and horizontal (between the police districts). The guidelines entailed formulations on what types of tasks and responsibilities the POD were supposed to do in the event of extraordinary incidents but they were ambiguous. In a similar vein, the guidelines entailed mentions of what was called "neighbor assistance", i.e. how police districts could request assistance from other police districts. However, the guidelines said nothing on "neighbor assistance" in settings characterized by urgency, nor anything on what adjacent police districts were supposed to do if they were unable to establish sufficient contact with the affected police district, which was a prevalent problem on 22/7. More importantly, inter-organizational crisis coordination was rarely practiced by the police districts in the years prior to 22/7, either in real work settings or in training or exercises, which was an important reason why the police districts and the POD responded as they did. In the following, I briefly mention additional reasons why the actors responded as they did, delineated to the respective actors.

There are four more reasons to be added regarding why the Oslo police turned down any offers of assistance and did not request assistance from adjacent police districts, in the initial phase. First, the Crisis Command Group (CCG) in the Oslo police was under the impression that the POD would coordinate the mobilization of external police capacities. Second, the Oslo CCG lacked overview of own capacities. Due to limitations in the communication technology, those in command at the intermediate level could not see where its operative units were located. Third, the shift from normal structure to CCG structure resulted in confusion and parallel lines of communication at the intermediate level, which consequently led to non-couplings and mismatches in the information sharing. Information streams were coupled to the wrong people (mismatch) or not forwarded (non-coupling). Fourth, the magnitude of the bomb explosion exceeded the capacity of the Oslo police. In the initial phase the Oslo

police was preoccupied with mobilizing own capacities and trying to establish some level of shared situational awareness within own organization. In contrast to the Oslo CCG, the Incident Commander at the government complex had a reasonable overview of the situation delineated to the incident scene. For him it was evident that more capacities were needed, so when the National Police Immigration Service (NPIS) offered assistance the Incident Commander accepted.

There are two additional reasons why the requests made by the Nordre Buskerud police was piecemeal and ambiguous: first, the low staffing and the poor problem-fit at the OC; second, the Nordre Buskerud police had an inaccurate shared situational awareness. For approximately thirty minutes the Nordre Buskerud police were unaware that Delta was in the immediate vicinity of Utøya, and there was a widely shared belief that the local Fire and Rescue Services (FRS) was on its way with its search and rescue boat. Moreover, the Nordre Buskerud police were unaware of the camping resort in vicinity of Utøya with many civilian boats available.

Two more reasons help explain why the POD did not enact any joint order to mobilize to the police districts. First, many of the most experienced CCG members were on holiday resulting in a poor problem-fit, a CCG staffed with police officers that had little relevant experience to draw on. Second, the POD had limited access to first-hand information on what was going on. The POD was thus dependent on oral communication with, and written status reports from, those in command in the affected police districts.

The reasons for the mixed response from the police districts adjacent to the Oslo police and the Nordre Buskerud police has already been touched upon: the lack of clear signals from the Oslo police and the POD and limited experience with inter-organizational crisis coordination. A third reason was the severe limitations of the channels for inter-organizational information-sharing.

A final reason of importance was addressed by police's evaluation of its own response: "The evaluators have registered that the police itself are of the opinion that they in general can be too reluctant with enacting mass-mobilization in critical incidents" (Sønderland, 2012, p. 74). However, the evaluators did not

elaborate or make any reflections on *why* the police have been reluctant to enact mass-mobilization.

Although my data material does not give grounds for clear conclusions on this why-question, I will pinpoint two factors that may be part of the explanation based on the findings in this thesis. First, it may be related to a more general finding in this thesis – that crisis preparedness has not been a primary focus in the police. For instance, the police have not had pre-fixed response times on how swiftly they must respond to emergencies. Moreover, the police do not run drills on swift mobilization and deployment akin to for instance the Fire and Rescue service. These are just anecdotal evidence, but there is reason to believe such measures would have raised the awareness of swift mobilization in the case of critical incidents. Second, as demonstrated in chapter four, operative police work is not an integral part of the everyday work for many of those carrying out CCG functions in the police districts (see also Rosø & Torkildsen, 2015). In contrast, they are primarily preoccupied with administrative tasks and middle management, which does not nurture an operative mind-set.

11.2.2 Crisis coordination deficit

The second research question was: *Why was there a lack of coordination by the police in its response to the two terrorist attacks?* In order to give a succinct, and at the same time sufficiently elaborate answer, I distinguish between three aspects of the crisis coordination on 22/7, which jointly led to a large coordination deficit: precarious information sharing, low level of shared situational awareness and poor problem-fit.

The *information sharing* in the crisis coordination was precarious and characterized by weak information-couplings (loosely coupled and non-coupled). The paramount reason was that the channels for information sharing had severe limitations, most notably for inter-organizational information sharing: the malfunctioning national alarm system, the fragmented police radio system and the PO-log in the police districts, which only those working in the respective police districts had access to. Consequently, most information was shared via oral communication, supplemented in some cases with handwritten

notes, which resulted in the loss of vital information akin to the inevitable information loss that take place when playing the "telephone game".

The weakness of the information-couplings was intensified by two additional factors. First, the surge of information streams combined with the need for swift actions (cf. time as urgency), a common feature in crisis responses. Second, the operators' inexperience with inter-organizational information-sharing made it hard for the recipients to decode what the sender(s) were trying to communicate. The latter point brings me to the second aspect of the crisis coordination deficit prevalent on 22/7.

The OCs and CCGs struggled to enact some level of *shared situational awareness* of what was going on, who were doing what and what needed to be done next. The main reasons have already been pointed to, the severe limitations in the channels and the lack of relevant practice and training. A consequence of the latter was that those who encoded the information streams did not make their messages actionable for the recipients, which made it harder for the recipients to understand what they were supposed to do with the message. Furthermore, time was not made for the recipients to explicate how they had decoded the received information, which increased the risk of misunderstandings. In sum, this hampered the collective sense-making processes and resulted in low levels of shared situational awareness.

The third aspect was a poor *problem-fit*, i.e. there was a discrepancy between the attributes of the police capacities coupled with the problems and the attributes that was needed to handle the problems in an appropriate way. There were two main reasons why there was a poor problem-fit. First, there were no pre-fixed requirements on response time or the levels of staffing of specific capacities in the organizational design, such as air transport capacities, the OCs, the CCGs and the local UEH-units. Some of the consequences were hard-to-reach air transport capacities, OCs staffed with one person in periods of the week, and that the allocation of the UEH-personnel on the different shifts during a week could be rather coincidental, in particular, during the summer holidays.

The second main reason was the reactive mobilization by the POD and some of the police districts upon the bomb explosion, which affected the timing

of when efforts to mobilize were enacted. When 22/7 changed from a singular crisis to a sequential crisis, the reactive mobilization had consequences. For example, the Nordre and Søndre Buskerud police had not enacted any mobilization upon the explosion. If the POD had ordered the police districts to mobilize upon the explosion, or if the police districts had enacted measures on own initiative, this would have resulted in increased coordination capacity at the Nordre and Søndre Buskerud police. Whether an increased coordination capacity, for example increased staffing at the OC, would have made a significant impact on the outcome of the police operation Utøya we will never know. However, what we can state with certainty is that the problem-fit of the crisis coordination in police operation Utøya would have been improved if the Nordre and Søndre Buskerud police had mobilized upon the bomb explosion.

11.3 The theoretical framework: Prospects for future research

Is the multiple streams framework of relevance for studies of coordination in response to other predatory crises than 22/7, and crises more broadly? In the introduction chapter I stated that the ambitions with this thesis went beyond providing a rich descriptive account of how the police responded on 22/7. I developed a multiple streams framework to explain the patterns and dynamics I observed in my rich empirical material. A risk of developing a theoretical framework from a rich empirical material is that the framework is not applicable beyond the case of study. In the following I give a few examples that some of my findings are echoed in extant research on similar cases. I do this to indicate that the multiple streams framework could be applicable to other similar cases. Then I go on to argue why the multiple streams framework provides a relevant approach to the study of crisis coordination. Finally, I sketch some possible ways forward for developing the framework further and at the same time enhancing our understanding of how crisis coordination happens.

A brief glance at extant research indicate that there are similarities between the patterns and dynamics I found in this thesis and what other case

studies of crisis responses have found. For instance, in a broad study of the response to hurricane *Katrina*, Boin et al. (2019) found that coordination between the U.S. federal Homeland Security Operations Center (HSOC) and subordinate bodies was a challenge because of a conjuncture of what the authors call "push"- and "pull"-philosophies. The problem was that HSOC expected lower-level administrators to send ("push") critical information upwards, while subordinated bodies expected HSOC to ask ("pull") for information (Boin et al., 2019, p. 107). This dynamic has similarities to the coordination underlap that emerged between the national and local level upon the bomb explosion in Oslo because the police districts in the vicinity of Oslo expected to receive operation orders from the national level or a request from Oslo police district if their assistance was needed. The Oslo police district expected the POD at the national level to coordinate the mobilization, while the POD was hampered by designed incapacities and a poor problem-fit in its Crisis Command Group and therefore did not send any joint operations orders to the police districts except one order that was sent via the email-based alarm system (cf. chapter 8).

Another example of similarities between the findings in this thesis and existing research is the well-established finding that information-sharing is essential for achieving a coordinated response and, at the same time that information-sharing is a key challenge for establishing a shared situational awareness, also referred to as a common operational picture. This is evident both in response to predatory crises (Dearstyne, 2007; Deverell, Stern, Newlove-Eriksson, & Fors, 2014; Hu, Knox, & Kapucu, 2014; Kapucu, 2012; Rimstad et al., 2014) and crisis responses more broadly (Allen, Karanasios, & Norman, 2014; Quarantelli, 1988; Reddy et al., 2009). As Janssen et al. fittingly put it, "[t]iming is everything". Their point is that "[i]f information is delivered too late, it may fail to prevent damages or losses, while if too early, it may be neglected" (Janssen, Lee, Bharosa, & Cresswell, 2010, p. 2).

A limitation in extant research however, is that there are few studies that document in detail how information sharing actually happens during a crisis response (Bharosa et al., 2010; notable exceptions include Cornelissen et al., 2014; Dearstyne, 2007; Groenendaal & Helsloot, 2016). Network studies have

provided us with insights about the plethora of actors that may be involved in crisis responses, and who appear to be the most central nodes in the network (e.g. Hu et al., 2014; Kapucu, 2012). However, the approach provides us with little qualitative knowledge about the interactions they count. Many scholars who adhere to the emergence perspective employ field observations as an important source for their data collection and thus gain insights into how information is shared and more generally how coordination in crises happens. However, these studies are often limited to coordination at the incident scene (e.g. Beck & Plowman, 2013; Wachtendorf & Kendra, 2006) and/or focusing on the coordination within one team or unit (e.g. Bechky & Okhuysen, 2011; Faraj & Xiao, 2006).

I would argue that the multiple streams framework provides one possible way of avoiding some of the aforementioned limitations. First, the framework encompasses both broader historical and institutional characteristics and in-crisis features. By distinguishing between pre- and in-crisis coordination the framework highlights how the in-crisis dynamics are significantly conditioned by pre-existing structures and practices. Second, taking time as analytical locus and conceptualizing crisis coordination as the interaction of streams enables us to encompass the volatile and disruptive setting crisis coordination takes place in, how the level of coordinated response may fluctuate both synchronically (between different groups of actors) and diachronically (over time). Third, as a consequence of the two former points, the multiple streams framework mitigates the risk of hindsight bias in post-crisis analysis, because it puts an emphasis on who knew what (and who did not), when and why as the crisis response unfolded.

Assuming that the multiple streams framework is applicable to other similar cases and has relevance beyond this case study, what could be possible ways forward? From a multiple streams framework lens the crux for future research is to gain more insight into why the streams interact as they do, the timing of couplings and the role of human agency within this context.

One question of relevance is the relations between time, the streams and concepts such as speed (or tempo) and intensity. At what points during a crisis response are the streams most intense, i.e. when are the peaks of the information

sharing, the mobilization of capacities and the problems (and sub-problems) that need to be handled? Is there for instance variation between different hierarchical levels, between different types of organizations, between different periods of the crisis response, and/or, between different types of crises?

Another relevant question related to speed, is whether there are systematic patterns in the speed of the streams across different hierarchical levels, types of organizations and types of crises (cf. Ansell, Trondal, & Øgård, 2016). More importantly, what are the factors that may explain any systematic patterns and variation when comparing across different types of cases?

When researchers can offer probable answers to these and related questions, their answers can subsequently enhance policymaking efforts to reinforce the crisis coordination capacity of first responder organizations and the governmental apparatus more generally. I write *probable* answers, not "the" answers because I believe what we are dealing with in the realm of crisis management are contingent relations, rather than absolutes. The aim is to detect the conditions that make some events more likely than others. Enhancing our knowledge of what factors affect when, how and why the streams interact the way they do in different settings, will enhance our knowledge of what types of crisis coordination structures and practices are likely to work (and not) in different settings.

This study is a modest contribution in this regard because it is a single case study of the crisis coordination by one organization in response to one event. Akin to Flyvbjerg during his doctoral study on city development in Aalborg, I have often wondered "Who will want to learn about a case like this, in this kind of detail?" (Flyvbjerg, 2006, p. 237). At the same time, I do believe that studies that examine the concrete in detail, that provide rich empirical evidence on the dynamics of crisis coordination like I have strived to do in this thesis, are necessary to further develop our conceptual and theoretical knowledge of crisis coordination (cf. Flyvbjerg, 2006; George & Bennett, 2005; Gerring, 2004). However, in order to gain more firm knowledge on the probable scope and limitations of the multiple streams framework sketched in this study, more single and comparative case studies of crisis coordination are needed.

11.4 Lessons learned and policy implications

From a practitioner point of view, the central question is what are the possible learning points from this thesis when it comes to building crisis coordination capacity in the police, and in established first responder organizations more broadly? I will pinpoint one general point of practical relevance that this thesis has highlighted, before I briefly outline four more case specific points, followed by one reflection concerning crisis-induced learning in the wake of 22/7.

One general upshot from this thesis for practitioners is that a central coordination challenge is to try and steer the interaction of the streams and the timing of couplings. It is about developing coordination structures and practices that enhance the likelihood of appropriate timing of couplings, for instance when to mobilize and who has the overall command of the mobilization (cf. Ansell et al., 2010). A related task is to develop structures and practices for information sharing that reduce the risk of bottlenecks and information overload. More specifically one should ensure systems that relieve information nodes if they experience a sudden surge of incoming information streams.

The first of the more case specific points is the importance of information processing capacity, both in terms of functional technology, level of staffing at the OCs and competence building of the operators and the Operations Commanders.

Second, although I have argued that the police prior to 22/7 was characterized by a decentralized silo structure, it must be pinpointed that I do not mean by this that the emphasis on a decentralized structure should be changed. On the contrary, due to the urgency of crises it is the local first responder organizations that in most cases will play the central roles during the "golden hour" of crisis responses. Thus, it is of utmost importance to ensure an appropriate crisis coordination capacity at the local level (Albrechtsen et al., 2017). Related to this it is interesting to observe the policy processes on crisis preparedness post-22/7. It appears that substantial fiscal resources have been allotted to reinforce the crisis coordination capacity at the national level, and far less at the local level. For instance, the government has invested in building new operations control centers at the government level and in the national police

directorate. In contrast, the political bodies have still not defined minimum requirements to the level of staffing at the Operations Centers at the local level. This is striking considering that the poor problem-fit at the Operations Center in the Nordre Buskerud police was one of the most important single explanatory factors why the response in police operation Utøya was not more coordinated.

Third, the evidence demonstrated that the shift from normal to CCG structure when the police operation was at its most intense resulted in parallel lines of communication and an unclear command structure at the intermediate level. It is an open question whether the coordination challenges caused by the shift in command structure was related only to limited practice, or if it also relates to structure. I would argue it does relate to structure as well. The idea of shifting the command structure in the middle of a crisis is in stark contrast to the principle of parity, which is one of the four basic national crisis management principles. Furthermore, I have raised critical questions concerning the CCG structure to people in the police on several occasions[156] and I have yet to meet someone who is a strong advocate for the CCG structure (see also Rosø & Torkildsen, 2015).

Fourth, there is a need for more practicing on crisis coordination across police districts and between the national and local level, in particular, between the respective OCs, and between the OCs and the POD.

The reflection on crisis-induced learning in the wake of 22/7 concerns the role of the 22 July Commission. The report from the 22 July Commission was widely praised and has been a central source for several white papers, a police reform and legislation changes that have been implemented in the years after 22/7. When the recommendations of the report are referred to in white papers and policy reports the recommendations are taken for granted (Christensen, Lægreid, & Rykkja, 2018; Holst & Krick, 2018; Høyer et al., 2018). Given that incidents like 22/7 are still a very rare phenomenon in Norway it is worth

[156] For example on a speech held at a conference at the Police University College in June, 2018. There were 70–80 spectators, no one argued against my critical remarks. On the contrary, several police leaders approached me after my talk and said that they fully agreed.

mentioning the risk of "over-learning", implementing policy measures with a big impact based on one single incident with a low probability of (re)occurring.

The Commission concluded that "(…) the fundamental differences between what worked well and not on 22/7, were primarily related to attitudes, culture and leadership, and how individuals and organizations *exerted* the authority they had been given". Organizational structures were purportedly not a central part of the story, "the structural organizational challenges are less important (…). We have seen few examples that formal organizing has been a limiting factor. We have seen many examples that the leadership has not exploited the potential in its organization" (NOU, 2012, p. 456). In contrast, a main finding in this thesis is that the formal organizing of the police was an important part of the explanation. Most of the efforts to build crisis coordination capacity in the 2000s happened within the police districts, because of the "silo structure". The formal structure with its designed incapacities was also an important explanatory factor for understanding the coordination underlap that emerged between the national and the local level on 22/7.

That a research-based analysis comes to conclusions that differ from the conclusions of a crisis inquiry commission is nothing new. For instance, Snook's study of a friendly shooting down gave important explanations to puzzles that numerous inquiries and hearings had been unable to explain (Snook, 2002). Vaughan's study of the Challenger disaster argued convincingly that what the inquiry commission described as operative errors were not errors, but instances of "normalized deviance" in the respective organizations (Vaughan, 1996).

As for the difference between this thesis and the 22 July Commission more specifically there is reason to believe that the role of time mattered. The 22 July Commission conducted its work during the first twelve months after 22/7. Moreover, much was unknown about what actually had happened when they conducted their inquiries, and they had limited time. In contrast, I started my study three years after the events, and could draw on a number of evaluations including the report from the 22 July Commission documenting what had happened. Thus, I could focus more on the why-questions. Also, the Commission had a different role, it was to conduct an inquiry on behalf of the government,

while I have been free to decide what areas I want to examine in more detail. At the same time, the mandate the Commission had was very broad. The point is rather that they had some stakeholders and some expectations of the work of the commission.

Still, I would argue that one upshot from these reflections, and this thesis more broadly, is that crisis inquiry reports cannot be taken at face value. Their analysis, just like this thesis, is based on some theoretical assumptions where some features and dimensions are given more attention than others (Boudes & Laroche, 2009; Gephart, 1984; Renå & Christensen, in review). When practitioners, politicians and researchers consult inquiry reports it is important to distinguish between the descriptions and documentation of what happened, and the analysis of why the events happened as they did. Although the latter can be highly relevant and provide useful and valid explanations, it does not mean they are the only possible explanations.

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Appendices

Appendix I: List of interviews

The letters in the right column specify what topics the respective interviews focused on.

A: The organizing and practicing of crisis preparedness and coordination in the 2000s.

B: The national alarm system.

C: The events on 22/7.

D: Informal conversation in the early stages of the project.

The National police directorate (POD), 10 interviews (N-6), 7 by author

Nr	Position	Date	Topic
POD 1	Police director 2001-June 2011	May 30, 2012*	A, B, C
		Dec 19, 2016	A, B
POD 2	Assistant director 2005-2017, POD's representative at the Prime Minister's Crisis Command Group on 22/7	Mar 9, 2012*	A, B, C
		Oct 4, 2016	A, B, C
POD 3	CCG Leader on 22/7	Oct 11, 2016	A, C
		Jun 23, 2017	C
POD 4	POD's liaison in OPD CCG on 22/7	Nov 14, 2016	A, C
POD 5	Leader of Crisis Preparedness Unit	Oct 6, 2016	A, C
		Jun 13, 2017	B
POD 6	Police director on 22/7	Jun 1, 2012*	A, C

* Interviewed by 22 July Commission.

** Interviewed by police evaluation.

Oslo police district (OPD), 18 interviews (N-17), 12 by author

Nr	Position	Date	Topic
O 1	Commissioner	Mar 9, 2012*	A
O 2	Deputy commissioner, Leader strategic level on 22/7	Mar 7, 2012*	A, C
		Sep 19, 2017	A, C
O 3	CCG Leader	Oct 12, 2016	A, C
O 4	CCG Leader on 22/7	Nov 14, 2011**	C
O 5	Leader of Operations Centre	Mar 9, 2015	D
		Oct 12, 2016	A
		Jun 8, 2017	B
O 6	Operations Commander on 22/7	Nov 17, 2011**	C
O 7	Operations Commander 2 on 22/7	Sep 18, 2017	A, C
O 8	Incident Commander and CCG 3 (police operations), both on 22/7	Nov 17, 2011**	C
O 9	Operator on 22/7	Sep 12, 2017	C
O 10	Operator on 22/7	Sep 13, 2017	C
O 11	Operator on 22/7	Sep 14, 2017	C
O 12	Operator on 22/7	Oct 5, 2017	C
O 13	Operator assistant	Sep 27, 2017	C
O 14	System developer at Operations Centre	Apr 8, 2015	D
OPD 15	Helicopter service (two people)	Nov 18, 2011**	A, C

* Interviewed by 22 July Commission.

** Interviewed by police evaluation.

Nordre Buskerud pd (NBPD), 22 interviews (N-21), 6 by author

Nr	Position	Date	Topic
NB 1	Commissioner	Nov 3, 2011**	C
		Nov 17, 2011*	A, C
NB 2	Deputy Commissioner, CCG 5 (media) on 22/7	Oct 12, 2011**	C
NB 3	Police Station Chief, Incident Commander at Sundvolden on 22/7	Oct 18, 2011**	C
NB 4	Member of Commissioner's leader group	Oct 7, 2016	A
NB 5	Leader, Administration	Oct 7, 2016	A
NB 6	CCG leader on 22/7	Oct 10, 2011**	C
NB 7	CCG members (4 people) on 22/7	Oct 18, 2011**	C
NB 8	CCG member on 22/7	Oct 11, 2011**	C
NB 9	Took over as Operations Commander upon arrival, later took role as ass. CCG-leader	Sep 27, 2011**	C
NB 10	Operations Commander on 22/7	Sep 13, 2017**	C
		Oct 11, 2016	A, C
NB 11	Operations Commander, CCG 4 on 22/7	Oct 17, 2016	A, C
NB 12	Operator and later CCG member on 22/7	Oct 20, 2011**	C
NB 13	Leader UEH-unit, Incident Commander main land on 22/7	Oct 10, 2011**	C
		Oct 7, 2016	A, C
NB 14	P4 / Incident Commander on Utøya	Oct 4, 2011**	C
		Oct 26, 2016	C
NB 15	Incident Commander / P2a	Sep 27, 2011**	C
NB 16	P1a	Sep 30, 2011**	C
NB 17	P3a	Oct 25, 2011**	C
NB 18	P3c	Oct 18, 2011**	C

* Interviewed by 22 July Commission.

** Interviewed by police evaluation.

Others (34 interviews (N-41), 19 by author)

Nr	Position	Date	Topic
M 1	Department director	Feb 25, 2016	D
PUC 1	Course instructor	Feb 23, 2016	D
PUC 2	Former course instructor	Feb 24, 2016	D
PUC 3	Course instructor	Sep 30, 2016	D
K 1	Inspector	Jun 26, 2017	B
PIT 1	Director	Mar 8, 2012*	A, B, C
PIT 2	Senior Advisor	Nov 2, 2017	B
NPIS 1	Leader representative	Oct 14, 2016	C
D 1	Leader of Delta, Delta's liaison in OPD CCG on 22/7	Jan 18, 2012*	C
		Oct 17, 2016	A, C
D 2	Task Leader on 22/7	Nov 29, 2011*	C
D 3	Delta officer on 22/7	Jan 18, 2012*	C
D 4	Delta officer on 22/7	Nov 29, 2011*	C
		June 4, 2012*	
D 5	Delta officer on 22/7	Feb 17, 2012*	C
D 6	Delta officer on 22/7	Nov 29, 2011*	C
D 7	Delta officer on 22/7	Feb 16, 2012*	C
D 8	Delta officers on 22/7 (3 people)	Nov 14, 2011**	C
SB 1	Operations Commander on 22/7	Okt 3, 2011**	C
SB 2	Operator on 22/7	Okt 6, 2011**	C
SB 3	Operator on 22/7	Okt 26, 2011**	C
SB 4	Leader UEH-unit	Okt 3, 2011**	C
SB 5	Operative personnel on 22/7 (8 people)	Okt 5, 2011**	C
SB 6	Former CCG Leader	Oct 12, 2016	A
AB 1	Operator on 22/7	Oct 4, 2016	C
AB 2	Operative personnel on 22/7	Oct 6, 2016	C
AB 3	Operative personnel on 22/7	Oct 6, 2016	C
AB 4	Operative personnel on 22/7	Okt 13, 2016	C
F 1	CCG Leader on 22/7	Apr 4, 2016	A, C
F 2	CCG member on 22/7	Apr 4, 2016	A, C
F 3	CCG member on 22/7	Jun 26, 2017	C
V 1	CCG member on 22/7	Sep 19, 2017	C
FRS 1	Duty Chief on 22/7	Jan 14, 2016	A, C
		Jun 14, 2017	C

* Interviewed by 22 July Commission.

** Interviewed by police evaluation.

List of abbreviations used in table above (titled “Others”)

AB: Asker and Bærum police district
D: Delta
F: Follo police district
FRS: Fire and Rescue Service, local division Ringerike
K: Kripos
M: Ministry of Justice
NPIS: National Police Immigration Service
PIT: Police ICT-services
PUC: Police University College
SB: Søndre Buskerud police district
V: Vestoppland police district

Appendix II: Interview guide, topic A.

In the following I will provide some descriptions of what characterized the police organization in the 2000s (read: the time before "22/7"). Several of the points are deliberately pointed out from my side. I want you to comment on each of these descriptions. In particular, I wonder:
i) To what extent do you think the descriptions are valid?
ii) What specific responsibility did the POD have (for the descriptions where this is relevant)?

More generally I am interested in hearing what factors you think enabled or hindered development on the areas the descriptions touch upon.

- The POD took time to find its role in the government apparatus. The POD had, and has, a difficult intermediate position between the Ministry of Justice (MoJ) and the police districts. It varied how much trust and legitimacy the directorate had in the districts.
- A highly detailed, top-level governance regime (MoJ, the Government and Parliament) made it difficult for the POD to take on a strategic role as a strategic developer within the police, in particular on the field of crisis preparedness.
- Crisis preparedness was not a priority on the annual budgets. Neither in MoJ, the POD, nor the police districts.
- There has been a high threshold for requesting assistance from the Armed Forces. The norm was that it was done when own capacities were exhausted.
- The POD designed many plans, guidelines and instructions. These were distributed to the police districts - and to the specialized agencies when relevant.
  Crisis preparedness in general, and how to handle extraordinary incidents that require joint response from several police districts, in particular, were not prioritized issue in the police.
- The concept “Operations Center” was first introduced with Police reform 2000, but that was only on paper. For a long time, the OCs were primarily considered as internal switchboards. The Operation Centers and the operator function did not in practice have the status it gradually was ascribed in the crisis preparedness guidelines.
- There were no competence requirements for those working at the OCs. And no measures were taken to ensure similar problems were handled similarly by the OCs in the different police districts. For example, there were no

standardization of the functionality of the OCs, its tasks or standard operating procedures.

- The Crisis Command Group was given little training on handling extraordinary incidents.
- Within the respective police districts, it was the Commissioner and his / her leader group that ruled. This led to big differences in how crisis preparedness was organised and practiced in the police districts.
- There was little focus on how to interact and coordinate across police districts, and between the emergency agencies, in emergency situations – except for the necessary attention induced by actual events.
- There were little, if any, developments made in ICT.

Appendix III: A more elaborate version of table 8.1

Police district	After first attack		After second attack	
	Proactive actions?	What types of measures?	Proactive actions?	What types of measures?
Follo (3)	Yes	Reinforced the OC; established control posts at central freeways (16:30); alerted off-duty personnel about incident in Oslo and asked when they could be available.	Yes	Personnel dispatched to the POD and to assist the Oslo and Nordre Buskerud police at 04:00 on 23 July.
Romerike (4)	Yes	Reinforced the operative level, including personnel from UEH-unit; Established CCG; mobilised local intelligence unit; increased preparedness level at Gardermoen airport; Control post at main train station.	Yes	Implemented inner Schengen border control.
Asker and Bærum (10)	Yes	Reinforced the OC (+1); mobilized two CCG members; established overview of what police capacities it had available at what time.	Yes	Established control post at freeway coming from Utøya; dispatched police units to Utøya.
Vestfold (11)	Yes	Reinforced the operative level, including personnel from UEH-unit.		
Sør-Trøndelag (20)	Yes	CCG established; established overview of what police capacities it had available at what time.		
Hedmark (5)	Yes	Cameras at central border crossing turned in opposite direction.	Yes	Established CCG (19:15); Border control at one crossing to Sweden; Mobilize and dispatch units for operation on a farm registered in the name of the arrested perpetrator.
Telemark (12)	No		Yes	Reinforced the operative level, including personnel from UEH-unit.

Østfold (2)	No	Yes	CCG mobilised (19:23); Border control at Moss airport Rygge and several border crossings to Sweden (approx.. 21:00).
Nordre Buskerud (9)	No	Yes	Dispatched immediately all available police units to Utøya; reinforced the OC; mobilized internal and external capacities.
Søndre Buskerud (8)	No	Yes	Reinforced the OC; Dispatched immediately units to the main police station in Nordre Buskerud police district.
Vestoppland (7)	No	No	

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