
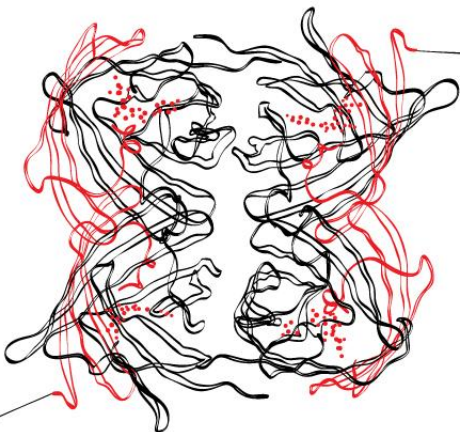
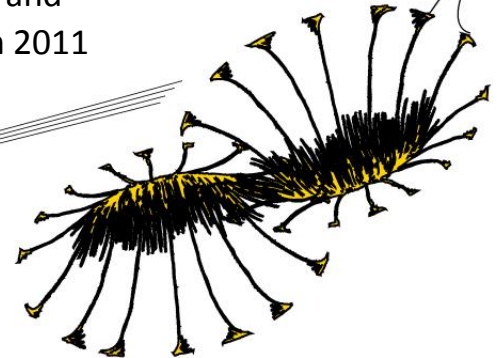




THE ROLE OF SOCIAL MEDIA IN CRISIS COMMUNICATION FROM A DEMOCRATIC PERSPECTIVE



A qualitative case study of the fire in Moerdijk and
the shooting incident in Alphen aan den Rijn in 2011



The role of social media in crisis communication from a democratic perspective

A qualitative case study of the fire in Moerdijk and the shooting incident in
Alphen aan den Rijn in 2011

Master thesis Public Administration
Specialization Public Safety

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Enschede, November 2012

Preface

While writing this preface as the last part of my thesis I am aware of the fact that this is also the last part of an important period. With this thesis I complete the master programme Public Administration with the specialization Public Safety at the University of Twente.

This research however could not be realized without the help of many involved ones who I would like to thank in particular. First of all I would like to thank Paul Abels of the National Coordinator for Counterterrorism and Security for his guidance during my research. By my supervisor Marsha de Vries of the University of Twente I came into contact with Paul Abels and he was willing to supervise me during my research. After several brainstorm sessions about relevant topics related to public safety the decision was made to focus on the role of social media in crisis communication. Especially with the recent fire in Moerdijk and the shooting incident in Alphen aan den Rijn fresh in everyone's memory, this was an interesting and up-to-date topic. With his expertise and connections Paul Abels was able guide me in making this research of relevance for the working field and bringing me into contact with the involved authorities for the interviews conducted for this research.

Besides my external supervisor I would also like to thank my supervisors of the University of Twente, Marsha de Vries and Ringo Ossewaarde. I am grateful for their positive feedback, the sharing of their scientific knowledge and the fact that I could always turn to them for questions and answers.

I would also like to thank the respondents of the different authorities which were involved in both incidents for their willingness to cooperate in the interviews. Although I am aware of the fact that most of them already received a lot of requests for interviews with regard to the specific incidents, I am grateful to them for taking the time to contribute to my research. Especially because of the fact that one was very open about the conducted crisis communication the interviews have been very useful for this research and a good experience for me as a person.

Finally I want to thank my family and friends for supporting me during the period that I was working on this thesis and also for all their support during my time as a student. With the publication of this thesis an end has come to my time as a Public Administration student at the University of Twente. A period on which I can look back with a lot of fun and good memories.

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November 2012

Summary

The increasing popularity of the social media is shown by the fact that they are nowadays playing an increasing role in people's everyday life and have become an important way of communicating with each other. This increasing popularity also has consequences for crisis communication. Where crisis communication was previously conducted by making use of the traditional media, the social media provide a whole new perception. Not only new media devices can be used in crisis communication, but also a pressure on the quick dissemination of information can be seen as a result of the social media. This research focuses on the role the social media can have in crisis communication from a democratic perspective. The main research question in this research therefore is: *"Which role can the social media from a democratic perspective have as an instrument for crisis communication in crisis situations?"* This democratic perspective is important since especially in crisis communication one can speak of a tendency between providing quick and sufficient information in combination with making important decisions in a limited time span on the one hand, and including the public in this crisis communication which can be seen as a time consuming process on the other hand. This research gives insight in why it especially in crisis communication is important to also pay attention to this inclusion of the public from a democratic point of view.

The above stated question is elaborated in this research by means of a qualitative case study which consists of two incidents in the Netherlands which both had great impact on society. These incidents are the fire in Moerdijk on the 5th of January 2011 and the shooting incident in Alphen aan den Rijn on the 9th of April 2011. The data collected for this research is retrieved from interviews being held with communication advisers of the different involved authorities in both incidents as well as from a document analysis.

The analysis shows that the social media are a good addition to the traditional media devices which are being used in crisis communication and can be used to achieve the three objectives of crisis communication; meaning, providing sufficient information and limitation of harm. The social media are also in accordance with the three key principles of crisis communication, openness, honesty and speed, what especially from a democratic transparency perspective is important in crisis communication. To increase the legitimacy of the crisis communication being performed, it is important to make sure that the public has a positive opinion about this crisis communication. In order to accomplish this, it is important as authorities to listen to the questions and feelings of the public. This can first of all be done by paying attention to these public opinions in the social media in an environmental analysis. By knowing what is going on among the public, one is able to adapt the conducted crisis communication to the specific needs of the public. Secondly authorities can interact with the public by making use of the social media which can also increase legitimacy. Last of all it is important in crisis communication to be as transparent as possible at any time. Even when no information can be given yet, it is important to inform the public that you are working on providing this answer. The social media can also be of relevance in providing this up to date information by making use of small messages in which limited information can be provided or one can be directed to locations where more information can be found.

Concluding it can be stated that especially in times of a crisis, when important decisions need to be made in a limited time span, it is still very important to pay attention to the democratic aspect which includes the needs of the public. Especially in the public sector the 'citizen' is central in crisis communication, therefore it is important to constantly keep the needs of the public in mind when performing crisis communication.

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1. Introduction

The popularity of the social media has increased the last couple of years which also brought consequences with it for crisis communication. Where crisis communication was previously conducted by making use of the traditional media, the social media give a whole new perception to crisis communication. Not only new media devices can be used in crisis communication, but also a pressure on the quick dissemination of information can be seen as a result of the social media. This research focuses on the role the social media can have in crisis communication and this will be determined from a democratic point of view. This democratic perspective in more detail focuses on democratic legitimacy; how does the public accept the conducted crisis communication. One of the leading questions which will be answered in this research is which opportunities the social media provide in crisis communication to enhance the democratic legitimacy of the conducted crisis communication. To obtain more insight into the above stated question, two incidents in the Netherlands have been analyzed which both had great impact on society. These incidents are the fire in Moerdijk on the 5th of January 2011 and the shooting incident in Alphen aan den Rijn on the 9th of April 2011.

1.1 Background

The social media are nowadays playing an increasing role in people's everyday life and the use of the social media has become more and more important as a way of communicating in the last couple of years. Social media like Twitter, Facebook, YouTube and LinkedIn have gained more and more popularity (Pondres, 2011). From the social media especially the 'big tree' services as Facebook, Twitter and Youtube have grown tremendously in the last couple of years. Since Facebook was created in 2004, it has in 2012 grown to 845 million active users worldwide. Also Twitter has grown increasingly in five years since it was created in 2006 to over 300 million users and with the establishment of YouTube in 2005 it has become more easy to distribute video content. One of the underlying factors of this increase in popularity is because the social media make it possible for large numbers of people to easily and inexpensively be contacted via these social media services. Also the approachability of the social media have increased its popularity, where the social media make it possible for everyone to share information (Safranek, 2012, p.1-2). This popularity is not only shown by the increasing amount of people who are using the social media, but also by the fact that they involve many actors, like regular citizens, activists, nongovernmental organizations, telecommunication firms, software providers, but also governments (Shirky, 2011, p.1).

The increasing influence of the social media is illustrated by recent developments in the last couple of years where the social media also had influence on governments. One of these distinct developments are the revolutionary events in the Middle-East in the spring of 2011. The so called Arabic Spring can be seen as a good example of the emerging role of social media in political and regime change, which is being described by Safranek in her article (Safranek, 2012). But what do these recent developments imply for public policy makers? A situation in which the social media almost cannot be ignored any longer by the authorities is present nowadays. As the focus in this research is on crisis communication, it is important to determine whether this is also the case for authorities in crisis communication. Although the importance of the social media has increased the last couple of years, there are still pessimists about these new media devices. These pessimists see the social media as a threat. For example because of the fact that rumors can be disseminated easily and very fast as never was able before. Especially when focusing on crisis communication they claim

that in crisis communication it has become very difficult to hold grip on the (external) communication and because of this the formerly role of authorities or persons with authority, has diminished. On the other hand there are the optimists who emphasize the infinite possibilities the social media can offer, also in crisis communication. Based on the wisdom of the crowd the social media offer tremendous possibilities, whereas Twitter for example can help train travelers to inform each other about a interference or it can help to solve a specific problem with each other (Duin et al., 2012, p.143).

Particularly with regard to the topic of wisdom of the crowd it is also important to pay attention to the role of the social media in relation to democracy. A recent published report of the Wetenschappelijke Raad voor het Regeringsbeleid (WRR) titled 'Vertrouwen in burgers' states that involved citizens are vital for a democracy. Although there are nowadays more involved citizens than expected, these citizens do not feel called upon participating because of the ways the government has shaped this involvement. In order to increase citizen involvement the report states that government and citizens need to trust each other more (WRR, 2012, p.11). With regard to this first aspect of democracy, citizen involvement, the social media might also provide ways in crisis communication to accomplish this. But also with regard to democratic legitimacy it is important to determine the role of the social media in crisis communication. How can the social media for example be of help in increasing the public's content with the crisis communication performed by the authorities. Especially in times of a crisis one can speak of a tendency between providing sufficient information and making decisions in a limited time span on the one hand, and keeping in mind democratic values, like legitimacy, on the other hand. Where the first can be seen as a process in which there is a time limit and one needs to act as quick as possible, the latter can be seen as a time consuming process.

Although recent research has already shown that the use of social media in crisis communication by authorities can be effective and especially Twitter is a good addition to the normally used communication resources (Bos, van der Veen & Turk, 2010, p.p. 49-51), this research will give new insight in this role of the social media in crisis communication where a democratic point of view is taken into account. The focus in this research will be on how the social media can be useful in achieving the objectives of crisis communication, which are meaning, providing sufficient information and limitation of harm, and why at the same time the use of the social media is important in crisis communication from a democratic point of view. How can the social media for example be of use in crisis communication in order to increase the democratic legitimacy of the crisis communication being performed by the authorities?

The above stated question will be elaborated in this research by focusing on the crisis communication of two incidents which occurred in the beginning of the year 2011 in the Netherlands. The first incident took place on the 5th of January 2011 in the municipality of Moerdijk. On the outside area of the company Chemie-Pack, a packaging company for chemicals, a fire arose which rapidly spread to the total complex of Chemie-Pack. Soon after the fire started, it became clear that this was not just an ordinary fire, but a unique incident which had consequences for a big part of the West of the Netherlands. By combating the fire multiple safety regions and authorities became involved (IOOV, 2011, p.4). The second incident is a shooting incident which took place on Saturday the 9th of April 2011 in shopping area 'De Ridderhof' in Alphen aan den Rijn. Seven persons were killed, including the offender himself who committed suicide, and many people were injured during the incident (OM, 2011, p.3). The crisis communication of the above mentioned incidents have been

the topic of discussion in the Netherlands, especially because of the role of the social media in their crisis communication. Where the social media did hardly had a role in the crisis communication of the fire in Moerdijk, the social media however was included in the crisis communication of the shooting incident of Alphen aan den Rijn. Because of this difference these two cases can give good insight in which role the social media can have in crisis communication and can be of help for determining why it from a democratic perspective is important to include the social media in crisis communication.

1.2 Social media

When talking about the role of social media in crisis communication, it is important to explain what the social media exactly are and which types of social media can be distinguished. Social media is an umbrella term for all internet applications which make it possible to share information in a user friendly and often funny way. This includes not only information in the form of text, but also audio files and images which can be shared by the use of these social media sites (Pondres, 2011). Features of social media are platforms on the internet where users can organize, work together, maintain friendships, share, exchange, act and/or create. These platforms have open access and are decentralized which makes an active input of the users possible. The three most important characteristics of social media in that sense are: open, social and the user is key. The social media are characterized by the fact that the content is user generated and they are real time (with a lot of active users a social media-website is almost always actual). Next to this social media are personal, interactive and subjective because users can share their own opinion or information with each other (NCC, 2010a, p.2-3).

There are several types of social media and the social media can be characterized in different ways. The Nationaal Crisis Centrum (2010a, p.3-4) makes use of the following classification, which will also be used in this research:

- *Social networks*; the social networks are the most popular type of social media which make it possible to connect with friends, family, acquaintances and strangers by making a personal profile. On these profiles people can place information about themselves, pictures etcetera. These profiles can be linked with each other which makes it possible to build a personal network. The most familiar social networks are Facebook, Hyves, Buurtlink and Google Buzz which make it possible to communicate with each other online by exchanging messages, uploading video's or by joining forum discussions (NCC, 2010a, p.3).
- *(Micro) blogging and fora*; another type of social media, the weblog, makes it possible to publish a report online about something you want to share with other people. The people who read this weblog are able to react on this report and these reactions are public. Another way of sharing information is by making use of fora. Fora are the type of social media which is the oldest one and is meant to discuss or talk about a specific subject online with each other. The difference between a weblog and a forum is the fact that the emphasis of a weblog is on someone's personal opinion while the emphasis of a forum is on the opinion of a group. Twitter is an example of microblogging and is an easy way to share short messages of a maximum of 140 characters with each other. A message on Twitter is called a 'Tweet' and by posting a tweet you can inform other people about what you are doing at a specific moment. With Twitter users are able to follow each other, as soon as you follow someone you will receive the messages of this other person on your Twitter-account (NCC, 2010a, p.3).

- *User generated content / wiki*; a wiki is an example of an online platform which makes it possible for people to collaborate on a user generated content which can be used for knowledge acquisition. On this online platform one is able to adjust the information posted by someone else. This adjustment normally continues until there is consensus about the information which is published on that specific wiki (NCC, 2010a, p.3-4).
- *Media- & Newssharing*; next to sharing textual information, it is also possible to share , videos and/or music on the internet. This can be done on several platforms like Flickr, Picasa, YouTube and Vimeo (NCC, 2010a, p.4).

1.3 Research questions

This research is designed to obtain more insight in the role, and with this the advantages and disadvantages, the social media can have in crisis communication from a democratic point of view. This will be determined by making use of an analysis of the crisis communication of two recent incidents in the Netherlands. The first case in this research is the fire at the company Chemie-Pack in Moerdijk on the 5th of January 2011. The second case analyzed in this research is the shooting incident in Alphen aan den Rijn on the 9th of April 2011. Both cases and the role of the social media in the crisis communication are analyzed and compared with each other in order to determine which role the social media can have in crisis communication. Therefore the following main research question has been composed for this research:

“Which role can the social media from a democratic perspective have as an instrument for crisis communication in crisis situations?”

In order to answer this general research question several sub-questions have been compiled. By answering the different sub questions conducted for this research, continuously specific attention will be paid to the aspect of democracy, which will be discussed in more detail per sub question. First of all it is important to determine to what extent the authorities themselves made use of social media to gather information about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn since a lot of citizens posted information on the social media about both incidents. The first sub question to be answered is:

1. To what extent did the authorities make use of the social media to obtain information about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn?

By answering this first sub question the connection with democracy will be made by focusing on the collecting of information by the authorities via the social media in relation to democracy. Based on the examples coming from the cases of Moerdijk and Alphen aan den Rijn it can from a democratic perspective be stated why or why not it is important for authorities to make use of the social media to obtain information about the incident.

Once it is clear to what extent the authorities themselves made use of social media to be informed about the incidents, it is considerable to look at the reaction of the authorities after both acts and the way they informed citizens about what was going on. An important question coming with this is whether the authorities made use of the social media and which social media they did use to inform citizens. The second sub question therefore is:

2. How have the social media been used by the authorities to inform citizens about the fire in Moerdijk and the shooting incident in Alphen aan en Rijn?

Likewise the first sub question, also by answering this sub question the connection with democracy will be made. This again will be done by focusing on examples coming from the analysis of both cases. The cases of Moerdijk and Alphen aan den Rijn can be used to determine why it from a democratic perspective is important to make use of the social media in crisis communication and whether this use also might have downsides.

After it has become clear whether the social media have been used by the authorities to inform citizens about both acts, it is also important to look at the policy part of the crisis communication. Did both authorities have policies for incidents like these in which the aim was to make use of the social media? And did the authorities actually make use of these policies during the crisis communication of both acts, or did they choose for a different approach? The third sub question to be answered therefore is:

3. To what extent had the authorities policies aimed at social media in crisis communication and to what extent have these policies been used in the fire in Moerdijk and the shooting incident in Alphen aan den Rijn case?

The last sub question for this research focuses on the possible effects coming from the use of the social media in crisis communication. Again the cases of Moerdijk and Alphen aan den Rijn will be used as examples to substantiate these possible effects. Also by answering this sub question specific attention will be paid to democracy. This will be done by determining how the effects of the use of social media in crisis communication relate to democratic values. The fourth and last sub question to be answered therefore is:

4. Which effects of the use of social media as an instrument for crisis communication after the fire in Moerdijk and the shooting incident in Alphen aan den Rijn can be observed?

1.4 Research approach

The purpose of this research, which evaluates the role of the social media in the crisis communication of the fire in Moerdijk and the shooting incident in Alphen aan den Rijn, is to explore and describe the conducted crisis communication of both incidents from a democratic point of view. It is an explorative research because although research has been conducted about the use of the social media in crisis communication, this has not yet been done with taking a democratic perspective into account. Therefore the aim of this research is to obtain more insight in the specific role the social media can have in the crisis communication of a crisis situation and will determine how this relates to democratic values. Besides the fact that this is an explorative research, this research is also a descriptive research since both incidents will be described with specific attention for the social media which has been used during the crisis communication of both incidents. Another characteristic of this research is that it is a qualitative case study where two cases will be analyzed and compared with each other. Qualitative data related to both cases will be obtained by making use of interviews which are semi-structured, which consists of a questionnaire which is set up in advance but the interview offers room for input from the respondent. The respondents for this research will consist of representatives from both municipalities, representatives from the safety regions and representatives from umbrella organizations like the Nationaal Crisis Centrum (NCC).

1.5 Reading guide

In order to answer the research questions conducted for this research, a certain structure is given to this report. In the following chapter a theoretical framework will be presented which is of use for this research and especially for giving a structured answer to the research questions. The framework will give an outline on which theory is needed to determine the role of social media in crisis communication and will give specific attention to the relation between the use of the social media in crisis communication and democracy. In the third chapter the methodological framework for this research will be presented. In this chapter more precise will be explained how the theory is going to be applied in this research and how both incidents are examined in this research. The fourth chapter serves as a introduction into the two selected cases for this research. In this chapter both incidents are described in their most important aspects. Although this information does not answer one of the sub research questions yet, this information is necessary in order to get a total view of both incidents. Chapter five will consist of the results coming from this research and answers will be given to the different sub questions of this research. Based on the answers of these sub research questions, in the final chapter of this report a conclusion will be given which focuses on the role the social media can have in crisis communication from a democratic perspective. After this, also several recommendations will be done with regard to the use of social media in crisis communication.

2. Theoretical framework

The use of social media in daily life has expanded and cannot be ignored any more. This also has implications with regard to the use of social media in crisis communication. Where crisis managers previously focused on the traditional media as communication means, there is nowadays also a role for the social media in this instrument mix to a certain extent that the social media cannot be ignored any longer. But which opportunities provide the social media in crisis communication and how does this relate to democracy? Why is it from a democratic point of view important to include the social media as a communication mean in crisis communication? In this theoretical framework this question will be elaborated based on what is known in the literature. First the focus will be on what a crisis exactly is, after this the focus can be on crisis communication and several models will be presented which are of use for analyzing the two selected incidents in this research. After this the link will be made with social media, which is especially important in the context of this research. At last attention will be paid on the social media in relation with democracy which will be the leading guide in this research.

2.1 Crisis

Before the focus can be on crisis communication it is important to obtain more insight in what a crisis exactly is. The term *crisis* has been defined by many communication experts. According to Fearn-Banks (1996) a crisis is “a major occurrence with a potentially negative outcome affecting an organization, company, or industry, as well as its publics, products, services or good name” (Fearn-Banks, 1996, p.1). Next to this definition, Stamsnijder (2002) argues that a crisis is an emergency situation in the sense of an unexpected event or a series of events which has an extensive material and immaterial impact on the ones involved (Stamsnijder, 2002, p.3). Muller et al. (2001) state that the most useful definition of a crisis is that it is a threat which is accompanied by uncertainty and unpredictability and requires urgent actions (Muller et al., 2009, p.8). All these definitions given to crisis have several characteristics in common. These characteristics are that a crisis comes as a surprise, forms a certain threat and there is urgency for a short response time (Ulmer et al., 2007, p.5-7). Next to these three characteristics Ahmed (2006) argues that some of the essential features of crises are as well that they are a disruption of routine, an escalating flow of events together with a sense of losing control of the situation, heightened media attention, followed by scrutiny, inquiry, speculation, and, eventually, the proliferation of negative publicity (Ahmed, 2006).

The development of a crisis is according to Perrow (1984) something that can be seen as ‘normal’ for organizations, since the great likelihood of a crisis to occur. This is because of a hypothetical connection Perrow presented in his classic text ‘Normal Accidents’ between on the one hand the complexity and the degree of coupling of production and on the other hand the inevitability of accidents. Perrow states that many of the malfunctions that lead to crises are the result of unforeseeable technical interactions. In this context managers should no longer evaluate if an organization will face a crisis, but rather when, where, what type, and how large the crisis is which it will eventually encounter (Millar & Heath, 2004, p.311). Because of the continuous technological developments and the continuing grow of the population, also worse crises are becoming more prevalent. This include crises that we could not have imagined 20 or 30 years ago. Organizational crises have become a consistent part of our existence. We cannot prevent them and, as consumers, we cannot avoid them (Ulmer et al., 2007, p.14).

Perrow (1984) however focuses mainly on crises in the private sector whereas crises can also occur in the public sector, which will be the focus in this research. Crises in the public domain can include events and episodes which entail many dead and wounded or threaten to disrupt the social and political system. Besides these types of crises there are also crises which do not threaten people's lives, but which do threaten other values which are important in society. Examples of crises in the public sector are wars, riots, natural disasters, epidemics, infectious diseases of plants and/or animals, terrorist attacks, major transport accidents et cetera (Muller et al., 2001, p. 9-11). These crises inflict wide-ranging damage which can be physical (to humans and the environment), economic (to communities and individuals) and/or psychological (to victims, survivors, families, and observers) (Malone & Coombs, 2009, p.121).

All of these examples of crises can be classified by Coombs (1995) typology of crises in which he identifies four different types of crises. He makes a distinction between crises which are unintentional and intentional caused and which origins can be from within the organization or from without. This crisis type matrix is presented in Figure 2.1 and will also be used in this research to classify the two selected incidents for this research (Coombs, 1995, p.455). A faux pas is according to Coombs (1995) an unintentional action that an external agent tries to transform into a crisis. Accidents are unintentional and happen during the course of normal organizational operations. Terrorism can be described as intentional acts taken by external actors which are designed to harm the organization directly or indirectly and transgressions can be described as intentional acts taken by an organization that knowingly place publics at risk of harm (Coombs, 1995, p.456-457).

	Unintentional	Intentional
External	Faux Pas	Terrorism
Internal	Accidents	Transgressions

Figure 2.1 – Crisis type matrix (Coombs, 1995, p.455)

2.2 Crisis communication

Now the definition of a crisis is being explained the different crisis types have been distinguished, it is important to focus on the aspect of crisis communication and which theories have been developed with regard to crisis communication. It has already been addressed that this research will focus on the role of social media in crisis communication with a specific democratic point of view. Later on more attention will be paid to the concept of democracy, but it can already be stated that openness and communication are vital for every democracy and a maximum of transparency of government actions is a prerequisite for government and its citizens satisfactory bilateral contact. This transparency can be achieved by an active disclosure of as many information as possible (Wallage, 2001, p.55). Especially during a crisis it is important for authorities to provide citizens of information about what is going on and to be as transparent as possible about this. This information which is provided by the authorities during a crisis is called the crisis communication. According to Stamsnijder (2002) crisis communication refers to offering information from transmitters to receivers for the purpose of escalation of a crisis situation and thereby reducing the tangible and intangible consequences of an event. Communication is in this case very important to provide all involved parties as soon as possible with the correct and complete information, even before or after a crisis arises (Stamsnijder, 2002, p.3). When focusing specific on the public sector it can best stated that the main purpose of crisis communication is to effectively reduce and prevent injury or possible death

and to help communities and individuals to get back to normal state (Reynolds & Seeger, 2005, p.46-47).

In order to limit the escalation of a crisis situation, crisis communication has three objectives. The first objective is *meaning* (or interpretation) and refers to explaining what the crisis means for the ones involved and/or the society (NCC, 2010b, p.1). In this case it is important to reflect on the feelings of the victims and to indicate the feelings in the community. Showing compassion is also part of this (Monté, 2011, p.2). The second objective is *providing sufficient information* about what has happened and what is still going on at the moment. Next to this it is important to inform citizens about the actions the authorities are taking, why certain decisions have been made and the dilemmas the authorities are facing (NCC, 2010b, p.1). It is important to constantly keep citizens informed about what is going on and the process. Besides this, it is also important to inform citizens when there are uncertainties or answers to questions that cannot be given yet. In this case it is important to inform citizens about which actions are being taken to retrieve certain information (Monté, 2011, p.1). The third and last objective is the *limitation of harm*; inform citizens about possible threatening situations. This also includes the limitation of possible damage of reputation which might be caused by rumors by refuting these rumors (COT, 2010, p.4). Examples are informing citizens about the need to close doors and windows, leave the area or inform your neighbors and help each other (Monté, 2011, p.2).

Besides the three objectives of crisis communication, also three key principles can be distinguished. According to Jong & Bos (2009) these concepts are *openness*, *speed* and *honesty*. The openness of the crisis communication refers to the fact what the authorities want to inform citizens and what they do not want to tell the citizens. Often an high extent of openness is in the advantage of the party which provides the information. But although the authorities can strive for a lot of openness about what is going on, especially in an early stadium this might be difficult because there is a lack of information at that moment. This lack of information is related to the speed of crisis communication, the second condition. Speed of action is required to limit the escalation of a crisis, as soon as sufficient and quick information is provided by the authorities trust can be created. As soon as rumors about the crisis arise this leads to problems for the authorities (COT, 2010, p.4). Especially with the rise of the social media this condition is pressurized since there is a need for quick information and rumors can rapidly be spread with the social media. The last condition is honesty. Although one expects the authorities to only provide information which is true, a feature of a crisis is that the status of available information is unclear. This makes it important for the authorities to determine which information is correct and to inform citizens about the way the crisis arose (COT, 2010, p.4).

A crisis can be divided in several phases, which are also of relevance for the conducted crisis communication. Coombs (2007) distinguishes three phases; the pre-crisis, crisis and post-crisis phase. The pre-crisis phase involves three sub stages; signal detection, prevention and crisis preparation which entail actions to be performed before a crisis is encountered. But since not all crises can be prevented, it is important for organizations or authorities to prepare for crises as well. The second phase, the crisis event, begins with a trigger event that marks the beginning of the crisis and this phase ends when the crisis is considered to be resolved. Two sub stages can be distinguished in this phase; crisis recognition and crisis containment. Where the first sub stage is about realizing there is a crisis and responding to the event as a crisis the second sub stage focuses on resolving the crisis and

recovering from it. The third phase, the post-crisis is characterized by evaluating and learning from the crisis and being prepared for a next possible crisis (Coombs, 2007, p.18-19).

2.2.1 Synthesis model of crisis communication

Following the several crisis phases as being discussed by Coombs (2007), it can be stated that crisis communication does not suddenly start when a crisis occurs. To illustrate this, Horsley and Barker (2002) set up a synthesis model for crisis communication which focuses on the different crisis phases which is presented in figure 2.2. The model is specifically paying attention on the public sector and emphasizes the importance of cooperation. The model links processes and communication activities that can be used to prepare for and manage potential crisis communication events. Governmental organizations should co-operate with each other in all the three phases of a crisis, and which should already start in the pre-crisis phase. By cooperating, the public sector will be ready to coordinate the crisis communication with nongovernmental, community and also fait-based organizations when this is needed. This coordination between different governmental organizations is vital according to Horsley and Barker (2002) for preventing more harm and to help the public get the same and rightful message from all the public operators (Horsley & Barker, 2002, p.426-428). This model is useful for this research in order to give a structured answer to the second and third sub question, which focus on the use of the social media in crisis communication and to what extent one has set up policies which included the social media in crisis communication in advance.

In more detail, the model proposed by Horsley & Barker (2002) consists of six interconnected stages:

1. *Ongoing public relations efforts.* Effective crisis communication already begins before the crisis event itself. Therefore image building and continuous attention for public and media relations are important. Next to this it is important to ensure that communication systems are in place when they are needed during a crisis. A good understanding with the media is therefore important, it helps organizations during a crisis to get their messages out, and a good relation with customers and stakeholders increases the credibility of those messages.
2. *Identification of and preparation for potential crisis.* Good communicators identify potential problems and prepare for them. Although crises cannot be predicted, good plans can be adapted to the situation by trained personnel.
3. *Internal training and rehearsal.* Crisis communication plans make sure that all members of a crisis team know their roles and are prepared to handle their tasks.
4. *The crisis event.* After a crisis occurs, prompt, coordinated communication stops rumors and speculation; using the media to diffuse information is a key element in maintaining good public relations. Resolving the crisis in an ethical and humane manner is therefore crucial.
5. *Evaluation and revision of public relations efforts.* After a crisis has passed, public relations efforts must be evaluated and revised in afterwards. The authorities need to demonstrate that they have recovered from the crisis, have made changes to prevent it from happening again, and are prepared to deal with the next crisis that comes along. Authorities can also create additional media opportunities by providing follow-up stories and progress reports and thus handle a negative situation in a positive way (Horsley & Barker, 2002, p.416).
6. *Interagency an political coordination analysis.* Interagency coordination would allow government agencies to use available resources from other state agencies and perhaps even local governments. Agencies may need to combine their crisis communication efforts with other agencies that share the same types of potential crisis (Horsley & Barker, 2002, p.426).

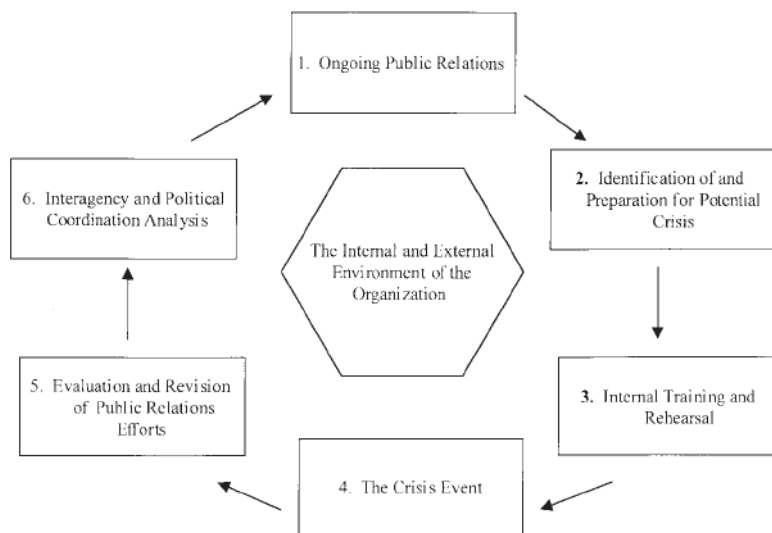


Figure 2.2 – Synthesis model of crisis communication for the public sector (Horsley & Barker, 2002, p.427)

The model of Horsley & Barker is of use in this research in the way that it can help answering the second and third sub question of this research in a structured manner. By using the different phases Horsley & Barker describe, insight can be given in whether there was policy aimed at the use of social media during both incidents and whether the social media indeed have been used in the crisis communication of both incidents. The model will also help by retrieving to what extent there was policy aimed at the cooperation between different authorities and what the role was of the social media in this crisis communication cooperation.

2.2.2 Situational crisis communication theory

The synthesis model of crisis communication for the public sector of Horsley & Barker (2002) is one of the models which over the years has been conducted for crisis communication and detailed research into the theoretical framework of crisis communication strategies has been developed. According to Coombs (2006) there are however several drawbacks in these models. Therefore he developed the 'situational crisis communication theory' (SCCT). SCCT is based on three core elements: the crisis situation, crisis response strategies, and a system for matching the crisis situation and crisis response strategies.

The first core element of SCCT; the crisis situation, focuses on the crisis cluster. Three kinds of clusters are being distinguished: the victim cluster, the accidental cluster and the preventable cluster. In the victim cluster the company is the victim of the crisis as well, one can think of a natural disaster, rumors, et cetera. In the accidental cluster the company does not have crisis intentions in its actions and examples are challenges, mega-damage or technical breakdown accidents. The last cluster, the preventable cluster refers to a situation in which a company intentionally places people at risk, takes inappropriate actions, or violates laws/regulations (Cooley & Cooley, 2011, p.205).

The second core element; the crisis response strategies, are the responses an organization uses to address a crisis. These response strategies are based on the words (verbal aspects) and actions (nonverbal aspects) the organization uses in relation to the crisis which is going on (Coombs, 2007, p.138). These actions and response strategies organizations use have a significant impact on the organization's reputation and are being used to repair the reputation, to reduce adverse affects and

to prevent negative behavioral intentions (Cooley & Cooley, 2011, p.204). Crisis response strategies were first examined as apologia, coming from the belief that crisis threatens reputations and apologia could be used to defend these reputations. Because apologia offered a rather limited number of crisis response strategies and one believed that also other crisis responses were being used, the number of crisis response strategies were expanded by examining the concept of accounts. These accounts are based on the statements people use to explain their behavior when that behavior is called into question. The same as with apologia, the crisis response strategies based on accounts are also being used to protect one's reputation from a threat (Coombs, 2007, p.138-139).

Coombs (1998) already established a way to categorize the different kind of crisis response strategies in 1998 by making use of a defensive – accommodative continuum. Defensive strategies are associated with the idea to protect the organization's image and are more common when crisis responsibility is weak. Organizations claim there is no problem or try to deny responsibility for the crisis. Accommodative strategies, on the other hand, are strategies that inherently address concerns of victims and stakeholders. Examples are compensation, apology or sympathy, where the organization accepts responsibility, takes remedial action, or both. Accommodative strategies are therefore more common in situations where crisis responsibility is strong. The several crisis response strategies are classified as follows by Coombs (1998): attack the accuser, denial, excuse, justification, ingratiation, corrective action, and full apology and mortification (Coombs, 1998, p.179-180).

When Coombs in 2006 established the situational crisis communication theory, he conducted next to the defensive – accommodative continuum another approach to categorize crisis response strategies. This approach is based on the aspects of apologia and accounts, and are the most common strategies for organizations to use in order to repair reputational damage from a crisis. These crisis response strategies can be found in figure 2.3 and are organized by determining if the intent of the strategy is to change perceptions of the crisis or of the organization in crisis. The strategies have been grouped into four clusters of strategies; denial, diminishment, rebuilding and bolstering. Denial strategies seek to remove any connection between the crisis and the organization, the basic objective is that an organization will not be affected by a crisis if it is not involved in or responsible for the crisis. Diminishment strategies attempt to reduce attributions of organizational control over the crisis or the negative effects of the crisis. Its basic objective is that if the attributions for control of the crisis are viewed less negatively, the reputational threat to the organization is reduced. Rebuilding strategies try to improve the organization's reputation. This is being done by saying words or taking actions designed to benefit stakeholders and to offset the negative effects of the crisis. The last posture are the bolstering strategies which are supplemental to the other three postures. Bolstering strategies also seek to build a positive connection between the organization and the stakeholders. Because these strategies are focusing mainly on the organization itself and can be judged as rather egocentric, they are considered as supplemental (Coombs, 2007, p.139-141).

Figure 2.3 Crisis response strategies, by postures (Coombs, 2007, p.140)

	Denial posture
1. Attacking the accuser	The crisis manager confronts the person or group that claims that a crisis exists. The response may include a threat to use force (e.g., a lawsuit) against the accuser.
2. Denial	The crisis manager states that no crisis exists. The response may include explaining why there is no crisis.
3. Scapegoating	Some other person or group outside of the organization is blamed for the crisis.
	Diminishment posture
4. Excusing	The crisis manager tries to minimize the organization's responsibility for the crisis. The response can include denying any intention to do harm or claiming that the organization had no control of the events which led to the crisis.
5. Justification	The crisis manager tries to minimize the perceived damage associated with the crisis. The response can include stating that there were no serious damages or injuries or claiming that the victims deserved what they received.
	Rebuilding posture
6. Compensation	The organization provides money or other gifts to the victims.
7. Apology	The crisis manager publicly states that the organization takes full responsibility for the crisis and asks forgiveness.
	Bolstering posture
8. Reminding	The organization tells stakeholders about its past good works.
9. Ingratiation	The organization praises stakeholders.
10. Victimimage	The organization explains how it too is a victim of the crisis.

The third core element of SCCT is a system that matches the crisis situation and the crisis response strategies. This system is based on the perception that a company's response strategy can be matched to the nature of the crisis situation; warranted by the crisis responsibility, reputational damage, and dictated by the crisis situation. This means that response strategies are to be selected according to the perceived acceptance of responsibility for a crisis by an organization (Cooley & Cooley, 2011, p.205).

2.2.3 Effects of crisis response strategies

Coombs (2007) distinguishes several effects which can be observed from the use of the different crisis response strategies. For each of the strategy postures he outlined what the best strategy for organizations is to follow when they are experiencing a certain crisis (Coombs, 2007).

The strategies which are based on denial focus on removing any connection between the organization and the crisis. This denial will result in the fact that as long as the organization is not involved in the crisis, it will not suffer any damage from this crisis. A common strategy in case of a crisis based on rumors, is for managers to argue that there is no 'real' crisis; they deny the truth to the rumor or refute the charges of immoral conduct. However, these strategies can only be effective when the stakeholders and the news media accept this frame of denial. If this is the case, the organization is spared from any reputational damage (Coombs, 2007, p.171).

The second cluster of strategies, the diminish crisis response strategies, are based on the idea that a crisis is not as bad as people think and minimization of the organization's responsibility for the crisis is a key. Crisis managers in this case need to lessen the connection of the organization to the crisis and/or try to make people view the crisis as less negatively. If an organization is capable in doing this

and has solid evidence that support these claims, the harmful effects of the crisis can be reduced for the organization. There however also is a possibility that the media and/or citizens are posting messages online which reject the organization's statements. In this case the stakeholders will be given competing frames and they will select the frame provided by the source they find most credible. Diminish strategies are the most effective when they reinforce existing crisis frames. Next to this, excuse strategies can best be used to reaffirm a crisis situation when this crisis can be characterized as an accidental crisis. This because reinforcing a frame in an accidental crisis is much easier and less expensive to manage as if one speaks of an intentional crisis (Coombs, 2007, p.171-172).

Rebuilding strategies focus on changing perceptions of the organization in a crisis and with this improving an organization's reputation. This is on the one hand being done by offering material and/or symbolic forms of aid to victims, like money or other gifts as compensation for victims of the crisis. On the other hand manager present new and positive information about the organization to stakeholders or they remind stakeholders of past good works done by the organization. In this way they try to positively influence the stakeholders opinion about the organization and with this their opinion about responsibility for the crisis. The key in this is to compensate the negatives from the crisis with current or past good works. These rebuilding strategies, like compensation and apology, are most effective when an organization is harmed from an intentional or accidental crisis which is accompanied by a crisis history or unfavorable prior relationship reputation (Coombs, 2007, p.172).

The last cluster of strategies consists of bolstering strategies like reminding, ingratiation and victimage. These strategies offer a minimal opportunity to develop reputational assets. The main idea of these strategies is to remind stakeholders of past good works in order to create goodwill to help protect the organizational reputation. These past good works are being used to counter balance the current negatives from the crisis. This strategy however demands that there are good past works on which the organization can rely. Next to the tactic of reminding, organizations can also create goodwill by praising stakeholders for their efforts during the crisis as a means of improving relationships with them. Another tactic for organizations is to explain that it is also a victim of the crisis. By doing this the organization can evoke sympathy. All bolstering strategies are most effective when they are being used as supplements to the three primary strategies (denial, diminish and rebuild) and adjusting information (Coombs, 2007, p.172).

Coombs (2007) also gave extra attention to crises with an intentional origin. He stated that these crises will create the most negative affect. Strategies in order to reduce or eliminate this negative effect can be used. For example; when making use of denial strategies it will be helpful if people accept the statement that there is no crisis. The adjusting information and rebuilding strategies are however the most effective ways to reduce negative affect. But also showing concern for victims is an example of adjusting information and expressions of concern can help to reduce negative affect. Expressing concern for victims (adjusting information) and reinforcing this compassion through compensation and/or a full apology serve to blunt feelings of anger.

2.3 Social media and crisis communication

Now an introduction to crisis and crisis communication has been given it is in the context of this research important to link crisis communication with the social media. Nowadays more and more people have access to the worldwide web. In 2010 at least 93 per cent of Dutch households had access to the internet and the Netherlands counted 8,1 million mobile phones with internet access. In total about 40 per cent of the Dutch citizens had access to the internet via mobile internet or another mobile device. With this increasing access to the internet, also the access to the social media has become easier and it has become more and more embedded in everyday life (NCC, 2010a, p.4). The social media make it possible for everyone to provide the rest of the world with news by posting photos, videos and messages on Twitter, Facebook and YouTube in only a couple of minutes after an incident occurred (Monté, 2011, p.1). Because these new media technologies make it possible for individuals to become sources of information online (they can share opinions, give insights, describe experiences and share perspectives with others), individuals are no longer the consumers of information but they simultaneously have become the contributors of information. This development is called the user-generated media. The news of a crisis can be shared and re-shared, where millions of people can be reached without the intervening presence of journalists. Also word of mouth news has become more and more influential and in some cases perceived as even more trustworthy than mainstream media (Veil et al., 2011, p.110-111). The operative of user-generated media also has another consequence, namely that journalists are not longer the 'gatekeepers' to the news. Also journalists themselves and the traditional media increasingly make use of the social media (especially Twitter) for their news gathering. This phenomenon has led to the development of so called citizen journalism; more and more journalists are making use of the social media and more often videos and messages of citizens are being incorporated in the regular news (NCC, 2010a, p.11).

But the fact that citizens have become journalist is not the only way how the emerging influence of the social media has increased. The social media make 'mass-self communication', as Castells (2007) describes it, possible. With this he means 'self-generated in content, self-directed in emission, and self-selected in reception by many that communicate with many' (Castells, 2007, p.248). This occurrence makes it possible for relative small groups to effectively exchange information as a basis for common action. On a larger scale transnational networks even make the form of mass movements possible. As Castells describes: 'The emergence of mass-self communication offers an extraordinary medium for social movements and rebellious individuals to build their autonomy and confront the institutions of society in their own terms and around their own projects' (Castells, 2007, p.249). Recent examples of the increasing power of social media with regard to the mobilization of people are the Facebook party in Haren (the Netherlands) that got out of hand and even resulted in riots (BBC, 2012) and the revolutionary developments in the Middle-East in the spring of 2011 (Safranek, 2012). This implies on the one hand that authorities should pay attention to the social media by knowing what is going on, but on the other hand also themselves make use of the social media in their own communication. At this moment public policy makers are more and more aware of this increasing role of the social media and in the Netherlands already several initiatives have been established where the social media are being used to provide insight in actual situations or campaigns. Especially on the local and regional level there are a lot of initiatives where the social media are being used to collect information from citizens or to ask for their opinion about specific cases. The social media in this manner also offer opportunities for the authorities, namely that they can interact with citizens and get to know their opinion about certain things (NCC, 2010a, p.7).

This rapid emergence of media innovations also brought consequences for crisis communication with it. Nowadays the new media and the emergence of social media play a crucial and indispensable role in crisis communication (Schultz et al., 2011, p.20). The social media gives crisis communication a new perspective, a perspective which was formerly based on the idea that authorities provide citizens with information. Nowadays this perspective is based on the idea that although authorities still provide citizens of information, they can also themselves gather information from citizens by making use of the social media. This means that the social media make it possible for authorities and citizens to interact with each other, where they can provide each other with information in a quick manner and rumors can be validated in an early stage. By doing this, the authorities have a mean to influence the news coverage of a crisis (NCC, 2010, p.9). Besides the fact that the social media make it possible for authorities to interact with citizens, the social media can also contribute in achieving the three goals of crisis communication; providing information, limitation of harm and meaning. The social media may serve to provide information or can shortly provide the location where more information can be found, this ensures that clear information is provided. They can also help to reduce the damage by warning people, provide them with an action perspective or they can support rescue operations by exchanging information. Next to this, social media can indicate a situation by for example eyewitness testimonies or video, image and sound (NCC, 2010a, p.8).

The social media also contribute to the three principles of crisis communication; openness, honesty and speed. They can be used to effectively and efficiently reach the target groups. Especially Twitter can be very useful in crisis communication (NCC, 2010a, p.11). Besides the traditional media, the social media can provide the possibility for open, honest and especially the rapid spreading of messages. The social media are flexible, but especially real time and therefore up to date. Their open and social nature makes them very accessible, so they can have a large scope. Also the authorities can make use of the social media in crisis communication by for example referring in a crisis message on Twitter or another social media to other instruments and media, like video, image and sound which can provide more information to citizens (NCC, 2010a, p.9). But the advantage of the use of social media in crisis communication in a manner that it can contribute to providing reliable information to the many in an easy manner and as quick as possible, also has a downside. This first disadvantage is the fact that because of the many-to-many communication model made possible by the social media, messages of the authorities might have difficulty being heard against all the other messages which are circulating on the social media (Freberg, 2012, p.416). Besides this first disadvantage the social media can also bring implications with it for authorities because of the speed aspect. Where the social media make it possible to distribute information in a quick manner, they also urge for quick dissemination of information. Where authorities previously were able to give a press release in a few hours after an incident, they nowadays need to give openness about the situation as soon as possible. One can say that the social media had an influence on this.

Although the role of the social media in crisis communication has increased the last couple of years, it is important to differentiate between the different types of social media since not all of the types of social media are relevant for crisis communication (yet). The most important type of social media in crisis communication at this moment is microblogging, of which the most popular type is Twitter. This type of social media is not only useful in the way that authorities can provide citizens with information, but also from the point of view that authorities can gather information from the things citizens post on Twitter about an event and which might be useful for the authorities to be aware of. Next to microblogging, also the social media type of media- and newsssharing is very useful. Since this

type of social media is known as sharing videos and/or music, this type of social media can especially be useful for authorities in the way that they can view the videos which citizens placed on for example YouTube about an incident which occurred in order to collect more information about the incident that has happened. The last type of social media which are useful in crisis communication are the social networks, like Facebook. Since not everyone is making use of Twitter, also Facebook or other social networks, can be of help for authorities to inform citizens about the crisis or by letting citizens inform each other about a crisis.

With regard to the use of the social media in crisis communication already several research has been conducted and several effective theories have been established for guiding the responses of organizations responsible for a crisis. The situational crisis theory of Coombs (2007) is an example of this. Jin and Fisher Liu (2010) have modified this theory into the Communication social-mediated crisis communication model (SMCC) which incorporates the social media (Jin & Fisher Liu, 2010). In this research they give several propositions on how crisis managers can engage with the blogosphere. The model established by Jin and Fisher Liu 'helps crisis managers monitor the blogosphere and respond, when appropriate, to influential bloggers' (Jin & Fisher Liu, 2010, p.429). One of the specific propositions coming from this research is that crisis managers should pay specific attention to the monitoring of rumors which complies with one of the advantages of the social media, which make it possible to locate rumors in an early stage (Jin & Fisher Liu, 2010, p.449). Where the focus of a lot of research is on crisis models for reputation management, Freberg (2012) focuses on the segmentation of the audience. Heath, Lee & Ni (2009) stated that 'appropriate segmentation of the audience is essential to reaching all persons potentially impacted by a crisis' (Heath, Lee & Ni, 2009). Based on this, Freberg states that age is one of the critical variables segmenting the audience when it relates to messages disseminated via the social media (Freberg, 2012, p.417). Also this research is of value for crisis managers, since it is important to make sure which people you will reach by making use of the social media in your crisis communication. Will the social media for example be sufficient in reaching all the people you want to reach in your crisis communication or can it be used complementary to other media devices.

2.3.1 Effects of social media in crisis communication

The importance of the use of social media in crisis communication is more and more known nowadays and with the main characteristics of social media being participation and interactivity, the social media can be of major importance in effective crisis communication.

One of effects of the use of social media in crisis communication is that the social media increases the possibility of misinformation which is circulating. Not only for citizens, but also for authorities and organizations this is a complicated situation since it is difficult to make a distinction between the right information and misinformation when you are not totally informed about that situation. For organizations and authorities it is in this context important to try to provide information as uniform as possible. This refers to the model Horsley & Barker (2002) presented in which they emphasize the importance of cooperation of public organizations in crisis communication. This includes that the information provided on the social media of all organizations should be in accordance with each other and with the information provided in other media and if wrong information is circulating on the social media, this information should be refuted. If the opposite occurs, citizens might be confused about what is exactly going on and their trust in the authorities might decrease because of this.

By determining whether or not to use the social media it is also very important to determine which social media are going to be used and whether they are only being used or complementary to other media devices. As Freberg (2012) states in her article age is a very important variable which determines the segmentation of the dissemination of messages via social media. It is up to crisis managers to determine which medium is going to be used to reach a specific group of citizens. Whereas crisis communication is about reaching as much people as possible in a short time span, it is important to adapt the mediums which are being used to the specific population one wants to reach. When for example only making use of the social media in crisis communication, elderly people will probably not receive the message. In this case one is dependent on word of mouth spread of the news. Determining which communication medium to use in crisis communication therefore corresponds with how the public will judge about the specific crisis communication and reputational effects are at stake.

Regarding reputational effects Coombs (2007) distinguished several effects as a result of the chosen crisis response strategy by an organization. These effects have been described previously, but no specific attention has been paid to the use of social media in crisis communication (Coombs, 2007). The link however can be made between these effects and the social media which can be used, since the use of social media can also have different effects as it provides new opportunities for crisis communication. In this context one can think of a denial or diminish tactic in which the social media can be used to deny responsibility for a crisis or state that a crisis is not as bad as people think and the organization's responsibility for the crisis is minimal. This can be done by immediately refuting rumors which are circulating on the social media by interacting with citizens. This possibility is however also a disadvantage of the social media because they make it also possible for rumors to arise because of the quick interaction with each other. These rumors can eventually harm an organizations reputation when stakeholders are aware of these rumors and therefore do not accept the denial or diminish strategy of the organization. Also for a rebuilding strategy use can be made of the social media in order to show compassion with the victims and/or apologize for the things that have happened. The social media however do not need to be the only medium to inform citizens, but it can be a good addition to the traditional media. When doing this, it is important to be uniform in the information which are being disseminated through the different media types in order to avoid confusion or ambiguity. With regard to the last cluster of response strategies, the bolstering strategies, the social media can also be used in order to inform citizens. Since the bolstering strategies are used in combination with the other clusters of strategies, the role of the social media and the effects coming from this use are less obvious.

The most important issue with the use of social media in crisis communication is to keep in mind that it can be effective when it is being used in the right order. Citizens can be reached effectively and efficiently and the social media can be used in combination with the traditional media. In this way the social media can help to increase the scope of the messages which are being sent out. An important statement however is that the social media should be used in a proper manner in order to achieve objectives by making use of the different strategies; if the social media are being used in a wrong manner, negative outcomes and reputational harm might be a result of this.

2.4 Social media in relation to democracy

Once it has become clear what is exactly being meant by crisis communication and how this relates to the use of social media in this crisis communication, it is interesting to take this one step further. The focus will now shift to the relation of the use of social media in crisis communication with democracy. The underlying question in this case to be answered is 'why is it important from a democratic point of view to include the social media in crisis communication?'. Before insight will be given in this question, it is first of all important to obtain more insight in the term democracy and on which aspects of democracy the focus will be in this research.

The literal meaning of democracy comes from a combination of two Greek words, *demos* (people) and *kratos* (rule). At its core democracy can be explained as a form of government in which the people rule (Sørensen, 1993, p.3). Beyond the literal meaning of democracy, there has been extensive debate about the criteria which determine what a democracy exactly is. Different definitions are for example provided by Schumpeter (1950), Held (1996) and Dahl (1989). Schumpeter states that 'the democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote' (Schumpeter, 1950, p.260). Held focuses more on the aspect of equality in his definition in which he describes democracy as 'a political community in which there is some form of political equality among the people' (Held, 1996, p.1). Also Dahl provides a definition of democracy in which he states that democracy was an ideal-type political system where citizens have the opportunity to formulate their preferences, to signify their preferences to their fellow citizens and the government, and to have their preferences weighed equally in the conduct of government (Dahl, 1989, p.10ff) (Ishiyama, 2012, p.27-28).

The different definitions given to democracy are focusing on different aspects of democracy, which for example are equality (as a basis of the sociological view on democracy), legitimacy, a democratic decision-making process or democratic citizenship. The aspect of legitimacy will be further elaborated since the focus in this research will be on democratic legitimacy in relation to the use of social media in crisis communication. Suchman (1995) states that legitimacy in very general terms can be explained as an umbrella evaluation that, to some extent, transcends specific adverse acts or occurrences. This implies that legitimacy is resilient to particular events, yet it is dependent on a history of events. Within this broad definition first of all formal (legal) legitimacy can be distinguished which refers to the manner in which a particular structure of authority was constituted and acts according to accepted legal rules and procedures. Also social (empirical) legitimacy can be distinguished which 'refers to the affective loyalty of those who are bound by it, on the basis of deep common interest and/or strong sense of a shared identity' (Curtin & Meijer, 2006, p. 112). Besides the legal and social approach of legitimacy, also an input legitimacy versus output legitimacy perspective can be distinguished. Whereas output legitimacy means that people agree that a particular structure should exist, and even participate in rule making, because of the benefits which come from it. This implies that social acceptance is instrumental and conditional, as well as independent of an affective relation. Input legitimacy on the other hand, means that social acceptance of the structure in question is derived from a belief that citizens have a fair chance (however understood) to influence decision-making and scrutinize the results coming from this. The capability to influence decision-making and hold one accountable for its decisions can be realized either through forms of representation which are held to be legitimate, or through direct

participation which is held to be meaningful. But also a combination of the two is possible (Curtin & Meijer, 2006, p.112).

When focusing on legitimacy it is also important to pay attention to the aspect of transparency, since these two concepts can be closely connected. Transparency is explained by the European Ombudsman Jacob Söderman (1998) as 'the process through which public authorities make decisions should be understandable and open; the decisions themselves should be reasoned; and as far as possible, the information on which the decisions are based should be available to the public' (Söderman, 1998, p. 6). The focus in this definition is on the legal dimension which includes decisions which are being reasoned and the issue of public access to information (Curtin & Meijer, 2006, p.111). Lord (1995) states that transparency requires that 'holders of public office should be as open as possible about all decisions and actions they take'. This requirement includes that they should give reasons for the decisions which are being made and restrict information only when the wider public demands for this. Based on this, it can be stated that transparency includes not only the passive right of every citizens to have access to information, but also the broader and more pro-active duty of the administration itself to ensure that information about its policy and actions is provided in an accessible manner (Curtin & Meijer, 2006, p.111). Based on their study on the effects of government websites on transparency, Moon, Welch and Wong (2005) state that the more transparent an organization is, the more willing it is to allow citizens to monitor its performance and to participate in its policy processes. Meijer (2003) has applied this statement to the public sector and argues that the use of ICTs especially strengthens the informational transparency of the government and the analytical transparency (Meijer, 2003). Based on this it can be argued that transparency in the sense of (voluntary) disclosure of information by public actors seems to be closely connected to legitimacy. Transparency can enhance public acceptance of institutional structures and by giving citizens the possibility to monitor policymaking and scrutinizing its results, the legitimacy of the institutional structures can be enhanced. In this increase of transparency of the government it is being argued that the internet can play an important role, and consequently can strengthen legitimacy (Curtin & Meijer, 2006, p. 111).

The increasing awareness of the importance of involving the public in crisis communication because of democratic reasons can be characterized by different developments which had consequences for public policymakers and politics. Castells (2007) explains that 'in the traditional theory of political communication political influence through the media was largely determined by the interaction between the political elites and professional journalists'. The traditional media in this manner had an influence on the shaping of the public opinion since they were the gatekeepers of the information flows (Castells, 2007, p.254). The new communication technologies have also increased the control of consumers of the new media devices and social networking has accelerated this transformation (Katz, 1997). Where the traditional political influence was previously based on a 'single axis system' the new media created a multi axis system. Because of this new multi axis system non-mainstream political actors are now able to influence political agenda setting because of the expansion of media-outlets and the fact that the news cycle is no longer of limited time but became a 24 hour news cycle. This means that news should not only be gathered as fast as possible but also be broadcasted as fast as possible. This development has led to the fact that the role of editors in the news production process has been eliminated because of effective reasons. Because of this the public are nowadays able to enter and interpret the political world because of this changed media environment (Williams & Delli Carpini, 2004. Castells, 2007, p.254).

In 2003 Bennett already addressed these changes due to new media technologies with regard to political communication. He recognized that the mass media was struggling 'with hanging gate keeping standards due to demands for interactive content produced by audiences themselves'. The more consumer-driven content created new possibilities for high-quality information governed by more democratic and less elite standards. This included that ordinary people were empowered by the new software to report on their political experiences while being held to high standards of information quality and community values. Bennett already encountered that these developments could be the most revolutionary aspects of the new media environment (Bennett, 2003, p.35). The fact that Bennett had a good foresight has been confirmed by the revolutionary developments in the Middle-East in the spring of 2011. Pictures and videos made by civilians on the scene were distributed via social media and were viewed by people around the world. It is clear that the new communication technologies, and especially social media, played a role in the upheavals and political and regime changes in the Middle-East, but the question remains how much this role of the social media exactly was and which medium had the biggest impact. Despite the fact that this question remains these developments can be seen as a good example of the power the social media can have (Safranek, 2012).

The fact that the social media are a source of power with regard to the mobilization of citizens, politics and even political and regime changes has been proven recently and one is aware of the fact that the social media should have an embedded role in public policy. An example of this is the inclusion of social media in crisis communication, where the social media can not only be used to quickly disseminate information and reach as much people as possible but also to interact with the public. But why is it from a democratic point of view important to involve citizens in public policymaking, for example by making use of the social media? According to a recent published report of the Wetenschappelijke Raad voor het Regeringsbeleid (WRR) titled 'Vertrouwen in burgers' the involvement of citizens is vital for a democracy. Although there are nowadays more involved citizens than expected, these citizens do not feel called upon participating because of the ways the government has shaped this involvement. In order to increase citizen involvement government and citizens should have more trust in each other (WRR, 2012, p.11). As a reaction to this report the Dutch cabinet agrees with the WRR that more space for social initiative is evident because citizens want and are able to take more control. This will lead to better results and a more compact government. Eventually this will also increase citizens satisfaction with their government and with this democratic legitimacy, as is being discussed previously. One of the main reasons to stimulate social initiative is because of the fact that current policies of the government are mainly formulated based on the system world of the government, instead of from the perspective and environment of citizens (Spies, 2012, p.2-3).

In order to accomplish policies which are based on the perspective and environment of citizens, policy participation should not only be focused on the planning phase of policy and the perspective of policy makers, but citizens should be able to join the conversation about plans of the government. Therefore policy participation should also be broadened to other policy stages like agenda-setting, policy implementation and crisis management which will bring opportunities with it (WRR, 2012, p.202-203, 212). One of these opportunities is that by means of web monitoring certain patterns or ideas can already be signaled in an early stage. By continually monitor the internet for important topics one is for example able to signal indications of displeasure among citizens which can eventually result in strikes. The main challenge in this case is to not use the new communication

devices, like the social media, only for defensive reasons, but also in a constructive manner. This can be done by determining where specific knowledge regarding a topic is located, who are involved in the topic, what is their knowledge and what contribution they can provide (WRR, 2012, p.208).

Also in crisis communication the social media can be used in a constructive manner since it can provide information on where experts related to a specific crisis can be found. But more important, by making use of the social media authorities are able to get insight in the specific questions the public has relating to the crisis which is going on. By collecting this information, authorities are able to adapt their crisis communication strategy to the specific questions and needs of the public. By taking into account the opinion and questions of the public in crisis communication, the opinion of the public about the deployed crisis communication will eventually also increase. By indeed making use of the knowledge of the public and involving them in crisis communication authorities show that they are able to possess resilience, which includes the ability to react, self-organize, learn and the modification of behavior (WRR, 2012, p.229).

2.5 Conclusion

A crisis can be defined as a threat which is accompanied by uncertainty and unpredictability and requires urgent actions (Muller et al., 2009, p.8). The information provided by the authorities during a crisis is called crisis communication and is based on the objectives of meaning, providing sufficient information and limitation of harm. Besides this, crisis communication is build on the principles of openness, honesty and speed. Several authors have established theories with regard to crisis communication which are useful for this research. These theories are the synthesis model of crisis communication of Horsley and Barker (2002) and the situational crisis communication theory of Coombs (2006,2007). Both theories can be of help by analyzing the two selected cases for this research in a structured manner. Where the model of Horsley and Barker focuses on the preparation of a possible crisis which can be of help by answering the third sub question of this research, the model of Coombs focuses on the conducted crisis communication strategy which can be of help by answering the second and fourth sub questions of this research.

Besides focusing only on crisis communication, this theoretical framework also paid attention to the increasing popularity of the social media which led to changes and new opportunities in the field of crisis communication. But where the social media can provide new opportunities for crisis communication, it also brings consequences with it. Several effects which can be the cause of the use of social media in crisis communication have been addressed in this theoretical framework which are based on the situational crisis communication theory model of Coombs. The last focus in this framework has been on the relation of the social media and democracy. To give more insight in this first the terms democracy and democratic legitimacy have been elaborated. In this context also attention has been paid to the aspect of transparency which is also of use in this research. After this several recent developments with regard to the relation of social media and democracy have been addressed. The knowledge provided in this theoretical framework can be of use in this research when analyzing the crisis communication of both selected incidents in this research and determining the role of the social media in crisis communication from a democratic perspective. During the analysis can be reflected to the aspects of democracy which have been addressed in this theoretical framework.

3. Methodological framework

In this research an answer will be given to the question which role the social media can have in crisis communication. By determining this role, specific attention will be given to how this use of social media relates to democracy and which opportunities the use of social media will bring in relation with democracy and more specific democratic legitimacy. In order to give an answer to the above stated question, in this research an analysis is performed on two cases. These cases are the fire in Moerdijk and the shooting incident in Alphen aan den Rijn which occurred in the beginning of the year 2011 in the Netherlands. This chapter will describe the research method which has been used for this research. This includes an outline on the research design, how the data has been collected and how the data has been analyzed in order to give an answer to the main research question of this research based on answering the different sub questions conducted for this research. Regarding the data analysis of this research, it will be explained which data has been used to answer the specific sub questions and in which way the theoretical framework of this research contributed in giving more insight into the role of the social media in crisis communication from a democratic perspective.

3.1 Research design

In this research the role of social media as an instrument for crisis communication will be determined from a democratic point of view. Because this field of research is relatively new and especially because of the democratic perspective which is being used, the purpose of this research is to explore. New suspicions of which role the social media can have and the expected effects of this use of social media in crisis communication will be developed in this research. Next to this, the purpose of this research can also be characterized as descriptive because of the research questions which are used in order to obtain more insight into the role of social media in crisis communication. These research questions are being used to describe the use of social media by the authorities in the crisis communication of both incidents and to describe the possible effects coming from this use of social media (Babbie, 2007, p.88-90).

Next to the first characteristic mentioned above, this research also has some other characteristics. One of these characteristics is that the research is an evaluation research, since the use of social media in crisis communication will be evaluated in two selected cases; the fire in Moerdijk and the shooting incident in Alphen aan den Rijn (Babbie, 2007, p.350). As two cases have been selected for this research and these cases will be compared with each other, this research can also be characterized as a comparative case study. The comparison of the selected cases is useful for giving recommendations for future crisis communication where social media will be used. More specific this research can be characterized as a qualitative case study. The reason why the choice for a qualitative study in comparison with a quantitative study has been made is because of the fact that a qualitative study makes it possible to gather relevant and thorough information about the two selected cases. Although the generalizability of a qualitative research method may be less compared to when a quantitative method is used, the two selected cases should give good insight in the role the social media can have in crisis communication. Besides the fact that this research is a qualitative case study, it can also be characterized as a document analysis. Given that several research has already been done with regard to both incidents, also several reports have already been published about both incidents which can also be of use for this research. Examples are the published reports by the Dutch 'Onderzoeksraad voor Veiligheid' and the 'Inspectie Openbare Orde en Veiligheid' of the Dutch

Ministry of Safety and Justice. These publications can be used in this research to get an overall view of both incidents and can also be used to help answering the research questions.

3.2 Data collection

3.2.1 Case selection

For this research two cases have been selected which are the fire in Moerdijk and the shooting incident in Alphen aan den Rijn which both occurred in the Netherlands in the beginning of the year 2011. Although the two cases both can be characterized as a sudden crisis which people did not see coming, they differ from each other based on the type of crisis they are. Following the crisis type matrix of Coombs (1995) which is presented in the theoretical framework, the fire in Moerdijk can be characterized as an accident. This crisis was an unintentional act which came from within the organization. The shooting incident in Alphen aan den Rijn on the other hand can be characterized as terrorism, since it was an intentional act committed by an external actor. Also in the aftermath of both incidents it became clear there was a difference between the two. Especially on the role of the authorities it became clear that a different tactic was being used for crisis communication. Because of this difference in the use of crisis communication and especially the role of social media during this crisis communication, these two incidents have been selected for this research. Both incidents can give good insight in the possible role of the social media in crisis communication in the acute crisis phase and the aftermath of a crisis.

3.2.2 Data and respondent selection

The qualitative data for this research related to both cases has been obtained by making use of interviews and a document analysis. The interviews are semi-structured which means that the interviewer sets up a questionnaire in advance which indicates the broad line of the interview. There however is room for the respondent to tell his own story, the interview is not fully specified in advance but only the broad outlines are known. There is also room for input from the respondent during the interview. In this way the questions are answered, but there is still room for information and conversation that might not previously been thought of (Van Thiel, 2007, p.109). Since several reports have already been published about the two selected cases for this research, also a document analysis will be used in order to obtain more insight into the role of social media in crisis communication.

For the interviews it was first of all important to contact the specific authorities which were involved in the crisis communication of both incidents. In the Moerdijk case this were the municipality of Moerdijk and the safety region Midden- en West-Brabant, since they were the source area of the fire, and the safety region of Zuid-Holland Zuid because they were the effect area of the fire. For the shooting incident case the municipality of Alphen aan den Rijn and the safety region of Hollands Midden were the involved authorities. In both cases the choice has been made to not interview each individual body which was involved in the crisis communication, like the police, the fire department and the Medical Assistance in Accidents and Disasters (GHOR), but to interview the safety region since all of these bodies are working together in a safety region. Based on this the safety region could give a good overview of the crisis communication that has been used at the time of the incident. Besides the geographical direct involved authorities also a representative of the Nationaal Crisis Centrum (NCC) and a representative of Buro Communicatiezorg have been interviewed because of

their experience with the use of social media in crisis communication. In Appendix 2 an overview of the interviews is presented.

After determining which authorities to interview, it is important to make sure that the ones who are being interviewed were really involved in the crisis communication of the incidents and therefore have a good overview of the total crisis communication. In this context it is important to make a distinction between the units of analysis and the units of observation for this research. The units of analysis in this research are the two selected cases in this research; the fire in Moerdijk and the shooting incident in Alphen aan den Rijn. These cases are being studied and the subjects we want to say something about. In order to say something about these two cases and gather information about them, it is necessary to gather data from the different authorities which were involved in the crisis communication of both incidents. Therefore these authorities can be considered as the units of observation for this research (Babbie, 2007, p.94-97). As the authorities which were involved in the crisis communication cannot be directly asked for information, it is important that the person that is being interviewed is the person that was most involved in one or both of the incidents, and has all the necessary information and knowledge about the incident and its crisis communication. This resulted in the fact that most of the interviews were held with senior communication advisors of the specific authority.

Besides the interviews also use has been made of a document analysis in order to obtain data for this research. The reason why also a document analysis has been used is because of the fact that already several studies have been performed about the two incidents. The reports coming from these studies provide information about both incidents and the applied crisis communication. Although the interviews can give good insight in the crisis communication, there is a chance that in-depth information is missing in the data collected from the interviews, therefore a document analysis is a good addition in order to collect all possible information which is available and to get an overall picture of both incidents.

Several reports have been studied for each of the incidents. For the fire in Moerdijk the following reports have been used:

- The report of the Inspectie Openbare Orde en Veiligheid of the Ministerie van Veiligheid en Justitie which is titled 'Brand Chemie-Pack Moerdijk. Een onderzoek naar de bestrijding van (de effecten van) het grootschalig incident'.
- The report of the Onderzoeksraad voor Veiligheid which is titled 'Brand bij Chemie-Pack te Moerdijk. 5 januari 2011.'
- A report of Price Waterhouse Coopers (PWC) which is titled 'Feitenoverzicht. Besluitvorming en het crisismanagement op het strategisch niveau binnen de veiligheidsregio's Midden- en West-Brabant en Zuid-Holland Zuid in verband met de brand bij Chemie-Pack in Moerdijk op 5 januari 2011'.
- A report of Crisisplan which has been written in commission of the safety region Midden- en West-Brabant and which is titled 'Praktijkervaringen en lessen crisiscommunicatie tijdens en na de brand bij Chemie-Pack'.

For the shooting incident in Alphen aan den Rijn the following reports have been used:

- The report of the Inspectie Openbare Orde en Veiligheid of the Ministerie van Veiligheid en Justitie which is titled 'Schietincident in 'De Ridderhof' Alphen aan den Rijn'.
- The report 'Lessen in crisisbeheersing. Dilemma's uit het schietdrame in Alphen aan den Rijn' published by the Politieacademie.
- A report published by the Openbaar Ministerie (OM) which is titled 'Samenvatting TGO onderzoek Komeet naar schietpartij Alpen a/d Rijn op 9 april 2011'.

Besides the reports of several studies, also the news about both incidents have been studied. For both incidents these news items were from national and local newspapers. One can think of Omroep Brabant, the NOS, the NRC, RTV Rijnmond and the Volkskrant.

3.2.3 Setting up interview questions

Because the two cases have quite a different nature it could be difficult to compare them especially with the information coming from the semi-structured interviews. Therefore use has been made of functional equivalence as being described by van Deth (1998) which makes it possible to compare similar concepts or phenomena in different settings. Deth (1998) describes five different ways in which functional equivalence can be established; attempts to increase the level of abstraction, making use of a common set of indicators focusing on internal or external consistency, and making use of a non-common set of indicators focusing on internal or external consistency. For this research the way of establishing functional equivalence by increasing the level of abstraction has been used. This means that irrelevant or specific aspects of the incidents were removed from the analysis which makes it possible to compare both different incidents with each other (Deth, 1998, p.6-14).

For setting up research questions use has been made of operationalization of the sub research questions. Based on the four sub research questions several concepts have been established which represent the important aspects of the research questions and are partially based on the different theories presented in the theoretical framework of this research when this theory is related to the sub question to be answered. For example with regard to the second sub question, the concepts of objectives of crisis communication and crisis response strategies are related. These concepts extracted of the objectives of Monté (2011) and the crisis response strategies of Coombs (2007). Also with regard to the third sub question a connection can be made with the theoretical framework, whereas the concept of the synthesis model of crisis communication of Horsley & Barker (2002) will be used to extract interview questions from this sub question. These concepts related to the sub questions are then converted into concrete characteristics which accordingly represent the aspects of the incidents to be investigated. By doing this the concepts are now able to be measured by means of the concrete characteristics. The last operationalization step which has been made is conducting interview questions for the interviews based on these concrete characteristics. A schematic presentation of the operationalization of the research questions is published in Figure 3.1 on the following page.

All the interviews held for this research have been recorded and were then transcribed. By transcribing the interviews the original answers of the respondents are preserved and make it possible to directly refer to fragments of the literal wording of the respondents in this research. In order to analyze the interviews and compare them with each other, the transcripts have been coded. This is done because during the interviews information can be given which is less relevant for this

research. The coding of the transcripts is done by making use of the method described by Boeije (2008) and Van Thiel (2010). They argue that an interview should be divided into several fragments where the relevant fragments will be labeled with a specific code (Boeije, 2008, p.85). Comparison of the interviews is then possible by looking at all the same codes in the different interviews. Because the interviews for this research were based on a questionnaire the different coding topics were already set up in advance. Then all the codes were compared with each other and if necessary adapted, which is called axial coding (Boeije, 2008, p.98).

Figure 3.1 – Operationalization of the research questions

Research question	Concepts	Concrete characteristics	Interview questions
1. To what extent did the authorities make use of the social media to obtain information about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn?	Citizens on social media		1. Have the social media been used in order to obtain information from citizens about the incident and which social media have been used?
	Other organizations on social media		2. Have the social media been used in order to obtain information from other organizations about the incident and which social media have been used?
2. How have the social media been used by the authorities to inform citizens about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn?	News dissemination via social media	News dissemination via which social medium	3. Which social media have been used to inform citizens about the incident?
	Interaction with citizens on social media	Interaction with citizens	4. Have these social media been used to interact with citizens?
	Objectives of crisis communication	Meaning / providing information/ limitation of harm	5. With what goal have the social media been used? Were they used to inform citizens about what was going on, to instruct citizens about what to do or to give meaning to the incident (informing citizens what the incident means for them)
	Crisis response strategies	Denial/ diminishment/ rebuilding/ bolstering	6. How would you describe the role of the authorities in this incident?
3. To what extent had the authorities policies aimed at social media in crisis communication and to what extent have these policies been used in the fire in Moerdijk and the shooting incident in Alphen aan den Rijn case?	Synthesis model of crisis communication	Social media in policy pre-crisis/crisis/post-crisis phase	7. To what extent did the social media have a role in the crisis communication plan for the communication in the acute crisis phase?
			8. To what extent did the social media have a role in the crisis communication plan for communication in the aftermath of the incident?
	Difference policy and implementation		9. To what extent was the crisis communication plan adequate enough at the time of the actual crisis and to what extent have adaptations been made?
4. Which effects of the use of social media as an instrument for crisis communication after the fire in Moerdijk and the shooting incident in Alphen aan den Rijn can be observed?	Reputational effects	Experience of citizens with social media	10. How do you think citizens experienced the crisis communication (and the use of social media)?
		Sufficient and reliable information	11. To what extent do you think the citizens received adequate information about the incident via social media and assessed this information as reliable?
	Uniform information	Several organizations providing information	12. To what extent did the involved organizations provided unambiguous information about the incident on the social media?
		Refuting false information	13. Do you think misinformation was spread on the social media and if yes, has something been done about this?
	Evaluation	Learning points	14. What would you do different when making use of the social media in crisis communication in the future?

3.3 Data analysis

The sub questions of this research will be answered based on the information collected from the interviews and a document analysis. The first sub research question *'To what extent did the authorities make use of the social media to obtain information about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn?'* will be answered by making use of the first and second interview questions, as they can be found in Figure 3.1. Besides making use of interviews this question will also be answered by making use of a document analysis since in several reports attention has been paid to the extent in which the authorities made use of the social media as input for their crisis communication strategy. A combination of the interviews with the document analysis will make it possible to give a sufficient answer to the first research question. When giving an answer to this first sub question, this will be done by taking into account the theoretical framework of this research. Especially the part of the theoretical framework in which the use of the social media in crisis communication is described is of relevance for answering this sub question. Monté (2011) and Veil (2011) have already described that the social media make individuals no longer consumers of information but they have become contributors of information because of the fact that the social media make it possible for everyone to provide the rest of the world with news. In this context it is important to determine why it is important for authorities to pay attention to the messages the public disseminate in the social media. By answering this first sub question the focus is on to what extent the authorities of the two selected incidents have made use of the social media to obtain information about the incident. Besides this, the focus will also be on democracy which is also related to the theoretical framework. By paying attention to democratic legitimacy as being described by Curtin & Meijer (2006) insight will be obtained in why it from a democratic perspective for authorities is important to obtain information about the incident via messages the public distributed in the social media.

The second sub research question *'How have the social media been used by the authorities to inform citizens about the fire in Moerdijk and the shooting incident in Alphen aan den Rijn?'* will also be answered by making use of interviews as well as a document analysis. In order to answer this second sub question, several concepts will be used from the theoretical framework of this research. First of all the focus will be on the news dissemination via the social media and which social media services have been used by the authorities in their crisis communication. Secondly the interaction with the public via the social media is important, which has been addressed in the theoretical framework as being a new feature of the social media. Also attention will be paid to the reason why the social media have been used in the crisis communication and with which goals, which refers to the objectives of crisis communication as being stated by Monté (2011). The last interview question conducted for giving an answer to this sub question is based on the crisis response strategies as being described by Coombs (2006). By determining with which objectives a specific crisis response strategy has been conducted by the authorities insight can be gained in why the authorities made a specific choice for the conducted crisis communication strategy. Likewise as will be done for the first sub question, also for this question the relation with democracy will be made in answering this sub question. In particular the focus will be on the aspect of transparency as being discussed by Curtin & Meijer (2006) in the theoretical framework of this research. In this context the question how transparent the authorities were in their crisis communication will be answered. In relation to this it is also important to discuss why it is important to be transparent in crisis communication, which is related to the aspect of democratic legitimacy as is also being discussed by Curtin & Meijer (2006).

The third sub research question *‘To what extent had the authorities policies aimed at social media in crisis communication and to what extent have these policies been used in the fire in Moerdijk and the shooting incident in Alphen aan den Rijn case?’* will be answered by making use of three interview questions based on two concepts in combination with a document analysis. As well as in the interview as in the document analysis the focus will be on these two concepts. The first concept is extracted from the theoretical framework and relates to the synthesis model of crisis communication described by Horsley & Barker (2002). This model is of help in getting more insight in which phases of the crisis the social media have been used in crisis communication and how the involved authorities have prepared themselves for a possible crisis and in particular how they prepared for the use of the social media in the crisis communication of a possible incident. When insight has been obtained in this, it is important to pay attention to a possible difference in policy and implementation which is the second concept related to this sub research question. Also for this second concept the synthesis model of Horsley & Barker is used as a basis. The question to be answered is to what extent the crisis communication plan was adequate enough at the time of the actual crisis and to what extent adaptations have been made.

The fourth and last sub research question *‘Which effects of the use of social media as an instrument for crisis communication after the fire in Moerdijk and the shooting incident in Alphen aan den Rijn can be observed?’* will also be answered by making use of data retrieved from five interview questions in combination with data retrieved from a document analysis. Also here use will be made of three concepts derived from the theoretical framework. The first concept refers to reputational effects as is being addressed by Coombs (2007). Whereas the use of the social media in crisis communication can come with several reputational effects, it is important to determine how this is the case for both incidents in this research. The public can for example experience the use of social media as positive or can have negative experiences with it. The reputation effects coming from this use are also important to determine from a democratic point of view. Based on democratic legitimacy as being discussed by Curtin & Meijer (2006), it is important to determine to what extent these effects coming from the use of the social media are related to democratic values. In this context it is also important to determine to what extent the public judges the information proved by the authorities in the social media as sufficient and reliable information. Which is related to the aspect of transparency as also being discussed by Curtin & Meijer (2006). By focusing on these two issues more insight can be obtained into the reputational effects for the authorities in the two incidents in this research and how this relates to the legitimacy of the crisis communication being conducted. Besides reputational effects also the concept of uniform information is important to explore. For example, to what extent did the involved organizations provided unambiguous information about the incident in the social media or has misinformation been spread and if yes, what has been done about this. As is being described in the theoretical framework, the social media make it possible to quickly share information, but because of this speed also the danger of misinformation and the difficulty of providing uniform information are at stake. Therefore it is important to pay attention to these two concepts. The third and very important concept by answering this sub question is the evaluation part. Which learning points can be retrieved from both of the incidents and what would the involved authorities do different in the future? This concept is in line with the synthesis model of Horsley & Barker (2002) in which they emphasize the importance of an evaluation and a revision of public relations efforts. Also in the crisis communication of both incidents it is important to look back on the performed crisis communication, and determine what

could be done better in the future. Based on this evaluation good insight can be obtained on specific lessons for the future.

By giving an answer to the main research question '*Which role can the social media from a democratic perspective have as an instrument for crisis communication in crisis situations?*' the answers of the sub questions will cover the different parts of the answer to this main research question. Whereas the focus is on the role of the social media in crisis communication from a democratic perspective, the aspect of democracy, and more specific democratic legitimacy, will be the thread in this research and will constantly be addressed by answering the different sub questions. By doing this, the aim of this research is to give grounded reasons for the possible roles the social media can have in crisis communication and why it is important for authorities to focus on specific aspects of this use of social media from a democratic point of view.

3.4 Conclusion

In this research an answer will be given to the main research question and the sub research questions by making use of a qualitative case study. The cases in this research consist of the crisis communication with regard to the fire in Moerdijk and the shooting incident in Alphen aan den Rijn. The data for this research has been collected by means of interviews and a document analysis. Interviews have been held with involved communication advisers of different authorities which were involved in the crisis communication of both incidents. Also a document analysis has been done by making use of different reports which have been published prior to this research about both incidents. By giving an answer to the different sub questions which have been conducted for this research, it will be possible to give an answer to the main research question. Based on the answers on these sub questions it will be possible to determine the role of the social media in crisis communication from a democratic perspective. The latter means that throughout this research the aspect of democracy will be taken into account in order to determine the relation of the use of the social media in crisis communication with it.

4. Introduction of the two cases

The popularity of the social media has increased the last couple of years that it has become embedded in the daily life of many. That more people are using the social media in their own communication brought also opportunities with it related to how organizations, governments and authorities communicate with the public, for example in times of a crisis. Before the focus in this research will be on how the involved authorities of the fire in Moerdijk and the shooting incident in Alphen aan den Rijn made use of the social media in their crisis communication, it is also important to get more insight in both incidents. In this section a short outline will be given with regard to both incidents and the increasing popularity of the social media will be shown by making use of both incidents. Although the information in this section does not relate to one of the sub questions of this research, the background information is important to get a total overview of both incidents before the conducted crisis communication will be discussed in depth in the next section.

4.1 The fire in Moerdijk

On the 5th of January 2011 a major incident occurs in the municipality of Moerdijk. On the outside area of the company Chemie-Pack, a packaging company for chemicals, a fire arises which rapidly spreads to the total complex of Chemie-Pack. Soon after the fire started, it became clear that this was not just an ordinary fire, but a unique incident which had consequences for the South-Western part of the Netherlands. By combating the fire multiple safety regions and authorities became involved (IOOV, 2011, p.4).

4.1.1 Characteristics of the incident

On Wednesday the 5th of January the common room of the safety region Midden- en West-Brabant receives at 14.26 hours a message about a fire at the company Chemie-Pack N.V. which is located at the industrial part of Moerdijk (IOOV, 2011, p.25). A small fire started at the outside area of the company where a significant amount of flammable chemicals was located. These chemicals were packed in so called Intermediate Bulk Containers (IBC's) (IOOV, 2011, p.4). At first the staff of the company tried to extinguish the fire themselves. The staff did several attempts to extinguish the fire which seemed to be successful, but eventually did not succeed. As soon as the fire expanded and multiple IBC's melted the staff called the emergency services (IOOV, 2011, p.56). Because of the heat of the fire the IBC's collapsed in turn, which caused that a significant amount of flammable liquids were released (IOOV, 2011, p. 57). These liquids were poured over a part of the outside area of the company and caused that the fire quickly developed into a liquid fire. This liquid fire continued to expand over the total area of the company, including the premises of the company (IOOV, 2011, p.4).

During the incident the fire officers decided to let the liquid fire burn controlled. This means that they did not extinguish the fire, but that they prevented the fire to spread to the environment close to the company of Chemie-Pack. This tactic was chosen because of the fact that the tremendous heat made complete burning of the chemicals and a high plume rise possible, which limits the dangers for public health (IOOV, 2011, p.15). Due to the large liquid fire a large cloud of smoke arose. This cloud passed over the northeastern part of the municipality of Moerdijk and further into the direction of Dordrecht, the region Zuid Holland-Zuid, Rotterdam and Woerden. Because it was not clear whether the cloud consisted of toxic and hazardous substances, all residents in the area were advised to close windows and doors. This is in line with achieving the objective of crisis communication 'limitation of harm' as is being described by Monté (2011). Also the shipping traffic at the Hollands Diep was

stopped (Gemeente Moerdijk, 2011a). Because of these possible toxic and hazardous substances which were released during the fire, a lot of unrest arose about the dangers for the public health. Until more certainty was acquired about this, people were advised to stay inside and close windows and doors. There was uncertainty about this however for a long time (Gemeente Moerdijk, 2011a). At midnight the fire department gave the signal 'brand meester' (IOOV, 2011, p.25). The fire destroyed not only the total company of Chemie-Pack but also two premises of neighboring business Wärtsilä were set on fire (IOOV, 2011, p.4).

As is being discussed in the theoretical framework of this research, crises can be classified by making use of Coombs typology of a crisis (Coombs, 1995, p.456-457). Based on this classification the fire in Moerdijk can be characterized as an unintentional act which came from within the organization since the fire was not deliberately started but was due to an accident of one of the employees of Chemie-Pack. Because of this the fire in Moerdijk can be classified as an 'accident' based on the typology of Coombs.

4.1.2 News dissemination via social media

Twitter played an important role in the news dissemination of the fire in Moerdijk and is a good example of the increasing role of the social media in the spread of news. Where the common control room of the safety region Midden- en West-Brabant receives a message about a fire at Chemie-Pack in Moerdijk at 14.26 hours, the first messages on Twitter (tweets) were already posted on Twitter at 14.32 hours (Ranter, 2011d). Harro Ranter of Harro Media Monitoring (2011) analyzed all the tweets referring to the fire in Moerdijk immediately after the start of the fire. He states that in the first hour after the start of the fire already about 2500 tweets were sent referring to this fire. This amount of tweets increased to more than 20.000 tweets per hour in the time period of four hours after the start of the fire. In total about 118.000 tweets were published on Twitter from the 5th of January till the 8th of January 2011 referring to the fire in Moerdijk. The following figure shows the amount of tweets about the fire in the first hours after the start of the fire (Ranter, 2011b).

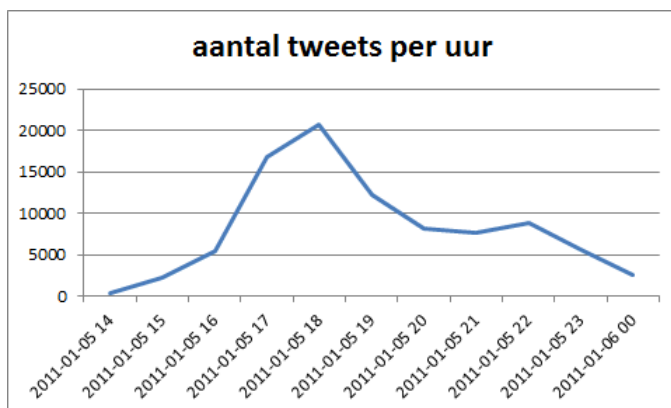


Figure 4.1 – Tweets per hour about fire in Moerdijk (Ranter, 2011b)

Ranter (2011) also analyzed the most active Twitter accounts in the period after the start of the fire and the most trending topics related to the fire on Twitter. Among the ten most active Twitter accounts was one of a resident living nearby Chemie-Pack. Other Twitter accounts which were very active were Crisiswerkplaats, Crisisbeheersing NL, Brandweerforum, Polder Twits and Krantenkoppen. Especially the active role of Crisiswerkplaats in the first hours after the fire started in Moerdijk is remarking since the communication on Twitter is being performed by an independent

body. In the next chapter of this report more in depth information will be provided about the role of Crisiswerkplaats in the crisis communication of the fire in Moerdijk. The analysis of Ranter also shows that the most trending topics related to the fire were alarm, vuurbal, crisis.nl, RTL and NOS. The following graphic provided by Ranter (2011) represents the total amount of tweets per hour with regard to these five topics. Remarkable in this figure is that the topic 'vuurbal' was still common on Twitter in the late evening whereas the other topics were becoming less frequent on Twitter.

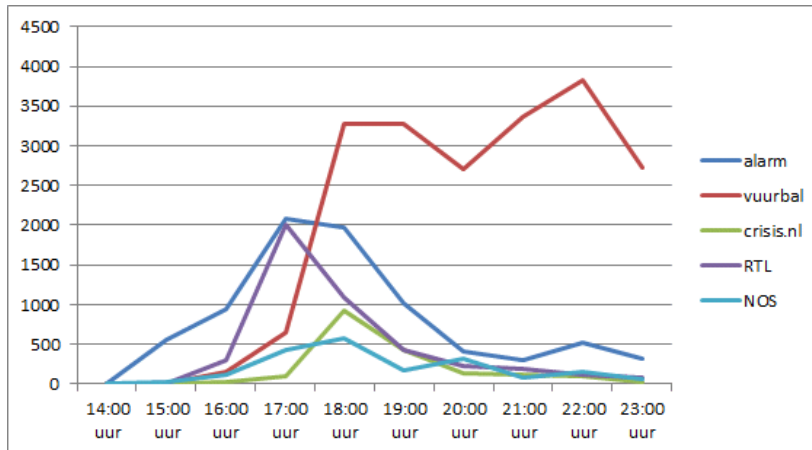


Figure 4.2 – Tweets per hour on trending topics (Ranter, 2011b)

Another aspect of the tweets which Ranter (2011) analyzed was the geographical information about the tweets. Because Twitter offers the possibility to add geographical information to tweets, he was able to locate tweets on geographical map of the Netherlands. This could be done for 1243 of the total amount of 118.000 tweets about the fire in Moerdijk. This is about 1 percent of all these tweets and although this percentage is relatively low, it can give a good view of the locations these tweets came from. Not coincidentally the map shows that the most tweets came from the area around Moerdijk and the areas of the nuisance of the cloud of smoke, but also in the other parts of the Netherlands a lot of tweets referred to the fire in Moerdijk. The geographical map of the tweets about the fire in Moerdijk is presented in figure 4.3 (Ranter, 2011a).



Figure 4.3 – Geographical mapping of the #Moerdijk tweets (Ranter, 2011a)

4.2 Shooting incident in Alphen aan den Rijn

On Saturday the 9th of April 2011 an shooting incident occurred on broad daylight in shopping area 'De Ridderhof' in Alphen aan den Rijn. Within a couple of minutes five persons were killed, eighteen persons were severely wounded and eventually the offender committed suicide. A sixth person died on way to the hospital. People who were in or near the shopping area alerted the police, but at the time the first police units arrived the incident had already occurred (Duin, et al., 2012, p.13).

4.2.1 Characteristics of the incident

In the morning of the 9th of April 2011 Tristan van der V. (further referred to as: Van der V.) leaves his parental home just after half past eleven and drove in his black Mercedes to shopping area 'De Ridderhof', which is located near his parental home (OM, 2011, p.3). Even after twelve o'clock Van der V. arrives at the shopping area and parks his car at the parking area which is located directly next to one of the entrances of the shopping area. Van der V. is dressed in camouflage pants and dark outerwear. He is wearing a bulletproof vest and has three arms (two small arms and a gun) and a supply of ammunition (IOOV, 2011b, p.44).

Immediately after Van der V. gets out of his car he makes his first fatal victim, an accidental passerby at the parking area (IOOV, 2011b, p.44). After this first incident Van der V. continued his way to the shopping area and while doing this he shot at two men who were talking to each other at the entrance of the shopping area. Both men fled but one of them had been shot multiple times. At eight minutes after twelve Van der V. enters the shopping area (OM, 2011, p.3). While walking calmly through the shopping area Van der V. is shooting at the shopping public, which created a big panic in the shopping area. People tried to escape through the exits or tried to seek cover in the stores. Some retailers let the shutters of their shop down. At the end of his journey Van der V. went to the Albert Heijn, where customers and staff sought safety at the back of the store. Then at eleven minutes after twelve Van der V. committed suicide at the pay desk of the Albert Heijn by shooting himself in the head (IOOV, 2011b, p.44). Within this short time span of only three minutes Van der V. was able to make six fatal victims and eighteen severely wounded. Besides the victims of the incident, also an enormous mass hysteria was created and the incident had great impact on Dutch society (IOOV, 2011b, p.44).

Likewise the fire in Moerdijk, also the shooting incident in Alphen aan den Rijn can be classified based on the classification of Coombs (1995). The shooting in Alphen aan den Rijn can be characterized as the exact opposite type of crisis than the fire in Moerdijk. One can speak of an intentional act committed by an external actor and therefore the shooting incident can be classified as 'terrorism' based on the typology of Coombs.

4.2.2 News dissemination via social media

Also in this case the social media and especially Twitter played an important role in the news dissemination of the shooting incident in Alphen aan den Rijn. Where the KLPD received an official report about the shooting incident in the shopping area at 12.09 hours, the first tweet about the incident was already posted three minutes later, at 12.11 hours on Twitter (Bas, 2012, p.32). In the first hours after the incident many people were active on Twitter and according to Twirus (a tool which can help you to find the most active topics on Twitter) the most trending topics were related to the shooting incident in Alphen aan den Rijn. By using the hashtag 'Alphen' almost 300 tweets per minute were being sent (Meijboom, 2011).

By using Twitter, people were able to inform each other about the shooting incident quickly and add possible new information to the tweets. Also exchanging pictures and videos of the incident belongs to the possibilities of Twitter. Twirus (2011) did analyze these tweets in the hours after the incident and presented them in an infographic, which is presented in figure 4.4. The graphic shows three occurrences with regard to the shooting incident in Alphen aan den Rijn in relation to the total amount of tweets in the Netherlands at that time. The blue line indicates the total amount of tweets in relation to the shooting incident in Alphen. This line shows that although the people which used Twitter were quickly informed about the incident, the official media reported about the incident only forty-five minutes after it did occur. This was done by the Twitter accounts of NRC, Geen Stijl and RTL Nieuws. The red line indicates one of the rumors which arose on Twitter after the incident, namely that the offender was an ex-military. As you can see on the infographic this rumor went for a lap time on Twitter but slowly trickled away. The green line refers to a call for a fifteen minute Twitter-silence at 20.00 hours which was launched later that day, where the initiative was to not post any tweets for twenty minutes in order to commemorate the victims. This Twitter-silence however did not become a success, as during 20.00 and 20.15 hours the same amount of tweets were posted as on a normal day (Twirus, 2011).

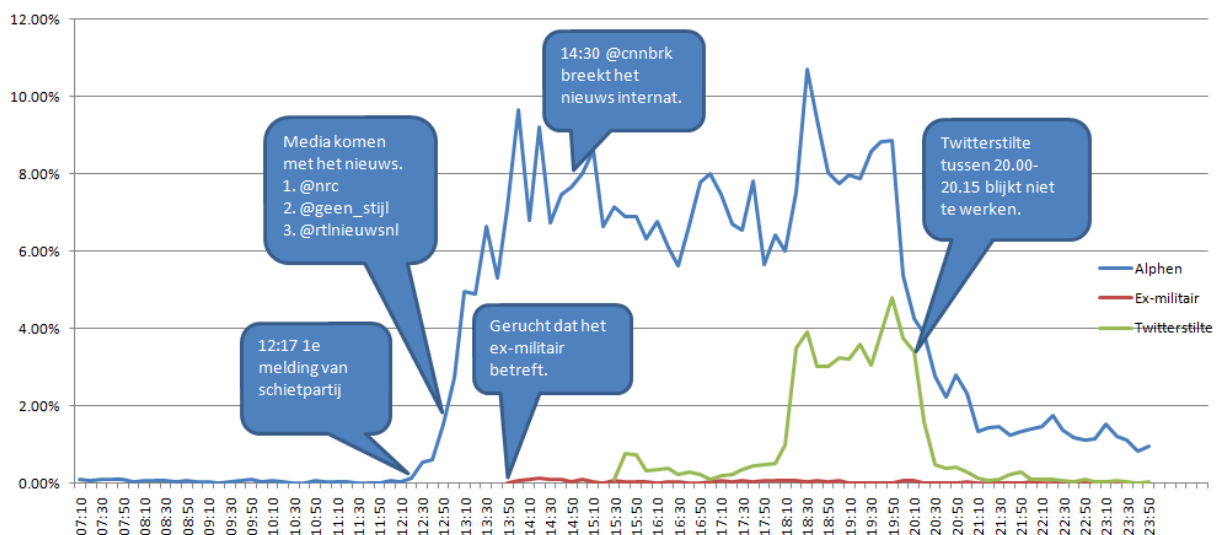


Figure 4.4 – Infographic Alphen on Twitter (Twirus, 2011)

Also the first days after the incident the tweets about the incident kept continuing. In the time period of 9 April 12.00 hours till 11 April 11.00 hours 70.000 tweets were posted in relation to the shooting incident. As he did for the shooting incident in Alphen aan den Rijn, Harro Ranter of Harro Media Monitoring (2011) also analyzed the Alphen aan den Rijn tweets and has located them on a geographical map of the Netherlands, which is presented in figure 4.5. For this incident it was possible to locate 720 of the 70.000 tweets and although the percentage of tweets which can be located is relatively low, it can give a good view of the locations where these tweets came from. Also in this case the map shows that the most tweets came from the area around Alphen aan den Rijn (Ranter, 2011c).



Figure 4.5 – Geographical mapping of the #Alphen tweets (Ranter, 2011c)

4.3 Conclusion

In this research two recent incidents in the Netherlands have been selected as cases for the analysis. These incidents are the fire in Moerdijk and the shooting incident in Alphen aan den Rijn. Where the fire in Moerdijk can be characterized as an accident based on the typology of Coombs (1995) since there was no intent for the fire, the shooting incident in Alphen aan den Rijn can be seen as the exact opposite type of crisis, which can be classified as terrorism since the offender had the intent to do harm. The increasing popularity of the social media is also shown by an analysis of the news dissemination of both cases. During and after both incidents a lot of information was circulating on the social media. This is especially shown by the enormous amounts of messages which have been sent via Twitter with regard to both incidents. The popularity of the use of the social media to disseminate information with regard to the incidents is not only shown by the high amount of messages which were being sent, but also by the amount of different actors which made use of the social media. In the case of the fire and Moerdijk and the shooting incident in Alphen aan den Rijn the analysis shows that not only the public posted messages on the social media, but also journalists and the authorities themselves made use of the social media. To what extent the authorities exactly made use of the social media in their crisis communication will be discussed in the next chapter.

5. The use of social media in practice

Now background information is provided on both of the incidents analyzed in this research, it is possible to focus on the conducted crisis communication of both incidents and which role the social media had in this. Have the authorities consciously made use of the social media in their crisis communication and why, or why has no use been made of it, are important questions to be answered in relation to this. Besides focusing on the actual deployed social media in the crisis communication, it is also important to focus on the effects coming from this use or non-use. Did the deployed use of social media in the crisis communication contribute to the opinion of the public about this crisis communication? And which role can be determined for the use of social media in crisis communication in relation to democracy based on the analysis of these two incidents? The above stated issues will be addressed in this chapter.

Before the focus will be on the crisis communication of both incidents, it is for both incidents important to outline the difference between the number of involved parties/authorities in their crisis communication. Whereas the fire in Moerdijk is an example of an incident in which a lot of parties from different regions were involved, this is in contrary not the case for the shooting incident in Alphen aan den Rijn. In the fire of Moerdijk first of all the municipality of Moerdijk itself and the safety region Midden- en West-Brabant were involved as the so called 'source area'. Besides the safety region where the fire was located, also the authorities in the 'effect area' of the fire were involved, which was the safety region of Zuid-Holland Zuid. In the fire in Moerdijk were in total two safety regions involved, six municipalities, three ministries, two 'waterschappen', the Nationaal CrisisCentrum (NCC) and several institutes like the Dutch Food and Drug Administration (VWA) and the Dutch National Institute for Health and Environment (RIVM). In contrary to the many involved parties in the fire in Moerdijk, in the shooting incident in Alphen only one safety region was involved, the safety region Hollands Midden. This difference between both cases is important to keep in mind during the analysis of both incidents and later on in this research will be referred to this difference.

5.1 News gathering by the authorities via social media

At the time of an incident authorities can make use of the social media to gather more information about what is going on and to get more insight in the questions citizens have about the incident and where they want an answer to. This information can be used in the environmental analysis which is part of crisis communication and the starting point for advices and strategies in crisis communication. By knowing what is going on among citizens and media and by analyzing this, it is possible to adapt the communication strategy to the actual feelings and thoughts of the public. By performing an environmental analysis it is possible for the analysts to bring the outside world to the inside and provide this with an interpretation. One of the main characteristics of an environmental analysis is that it not focuses on actual facts, but on how the outside world or the public experiences an incident. An example is analyzing which rumors are circulating in the (social) media and to determine what can be done to confirm or disprove specific rumors (Veiligheidsregio MWB, 2011, p.2). In the following section for both cases will be described whether use has been made of an environmental analysis in their crisis communication. Besides whether an environmental analysis has been used or not, it will also be addressed from a democratic perspective why it is important to include an environmental analysis in crisis communication.

Although an environmental analysis can mostly be seen as a starting point of crisis communication, an analysis of the crisis communication conducted in Moerdijk and especially the municipality of Moerdijk itself, shows that no use of the social media has been made in order to obtain more information in the first 24 hours after the fire started. The municipality of Moerdijk explains that *“in the acute crisis phase, and then we mean the first 24 hours of the fire, we did not perform an environmental analysis because of the fact that we are a small municipality ... since there were only two communication employees present at the town hall at the moment of the fire the social media part and the environmental analysis have been ignored”*. In this context a combination of an enormous hectic period and too few staff members is the reason why the environmental analysis and with this also the social media as input for this analysis has not been performed (Interview 3). The Safety Region Midden- en West-Brabant on the other hand explains that at the time of the incident they were working with a special crisis communication team (piketteam) which is a team to support the affected municipality, in this case Moerdijk. The safety region explains *“we already know a special crisis communication team for years and in this team one of the officials is an environmental analyst, this is also someone who is trained to do this. This means that this person was searching the social media, for example Twitter, and websites for more information about the fire”* (Interview 2). Also in the Safety Region Zuid-Holland Zuid attention has been paid to the environmental analysis. Although the first hour and a half were too hectic to pay attention to this, immediately after this they started with media watching since there were enough staff members to perform the analysis (Interview 6).

The fact that only the safety regions involved in the fire in Moerdijk paid (limited) attention to the environmental analysis and the municipality of Moerdijk did not pay any attention to an environmental analysis in the first hours after the fire started, is remarking. This because successful crisis communication takes into account the perception of the public. The public and their experience and questions are leading in crisis communication and can be used as a starting point for determining which crisis communication strategy to use (Crisisplan, 2012, p.3). Also because of the fact that with the development of the social media everyone has become a journalist and is able to distribute information, as is being stated by Monté (2011), it is remarking that the authorities did not pay attention to an environmental analysis in the acute crisis phase. Also because of the fact that citizens have received a mean with the social media to become more assertive, it is remarking that the authorities did not make use of this while this can be of great value in crisis communication. But not only from an information base point of view it is important to focus on the messages of the public in the social media, also from a democratic perspective it is important to pay attention to the feelings and thoughts of the public in crisis communication. By focusing on these feelings and thoughts of the public and later on use this information as input for the crisis communication strategy which is being conducted, citizens might also have a more positive opinion about the crisis communication being performed. This because of the fact that they have the feeling that their question or opinion is being heard, and is taken into account. Which then again is important from a legitimate perspective.

When comparing the news gathering by the authorities of Moerdijk with the authorities in Alphen aan den Rijn, it immediately becomes clear that a total other strategy has been used. Already directly after the shooting incident in Alphen aan den Rijn occurred, an Action Center Communication was arranged at the town hall of Alphen aan den Rijn. At this centre several tasks were distinguished, including the environmental analysis and responsibilities regarding the website. The environmental analysis was conducted by employees of the municipality and the police where

messages in the traditional media, on relevant websites and the social media were being scanned permanently. For the municipality it was for example important to know what was the public opinion about the incident, or how did retailers experience the incident. The police on the other hand focused primarily on detecting related topics. In total the Action Center Communication has delivered a number of eighty analyses to the policy team until the memorial on the 20th of April. Based on these environmental analyses, the policy team could then determine their administrative or police intervention. One of the main shifts which became clear in these environmental analyses was the shift in the focus of the questions of the citizens, whereas the questions were first primarily focused on getting to know what has happened, in the hours and days after the incident the focus more shifted to the 'why' question. (Duin et al., 2012, p152-154).

Besides the Action Center Communication, also messages in the social media were being followed by the Scale Investigation Team (Team Grootchalige Opsporing, TGO), the communication service of the police and the National Crisis Centre (NCC). By analyzing the media from different sides a more total image could be created of the incident and the effects of it (Duin et al., 2012, p.152). One of the advantages of an environmental analysis is the fact that rumors which are circulating on the social media rapidly can be found and something can be done in order to dispel these rumors (Interview 4). Also the 'Dienst Nationale Recherche' of the KLPD paid special attention to the social media in their detection policy. Immediately after the incident occurred, they set up a special website where people could upload videos they made of the incident. By this way the police could gather more information and evidence about what exactly took place in the shopping area (Nationale Recherche, 2012). Also this development is an example of the new possibilities the social media have and is focused on the involvement of media- and newssharings services in crisis communication as they are being described in the introduction of this report as classified by the Nationaal Crisis Centrum (NCC, 20101a, p.4).

When looking back at the news gathering part of crisis communication for the two cases, it can be stated that a great difference can be distinguished. Where in the Moerdijk case only the safety regions paid attention to an environmental analysis in order to scan the social media for feelings and thoughts among citizens, in the shooting incident in Alphen aan den Rijn case all the involved authorities paid attention to this environmental analysis. By following the social media intensively they were able to adapt their crisis communication strategy to the specific feelings and thoughts which were prevalent at a certain moment. From a democratic point of view this is a positive aspect of the conducted crisis communication, since the legitimacy of the crisis communication being performed can be increased by paying attention the specific needs of the public. By doing this, the public has the feeling that they are being heard. Whether these feelings have also been taken into account while performing the actual crisis communication of sending messages to the public, will become clear in the next part of this analysis.

5.2 News dissemination by the authorities via social media

As is being discussed in the theoretical framework of this research, crisis communication can have three objectives according to Monté (2011), which are meaning, providing sufficient information and limitation of harm. The social media can contribute in achieving these three objectives of crisis communication and are a good addition to the traditional communication means in crisis communication since they can also be useful in fulfilling the three principles of crisis communication, which are openness, honesty and speed (COT, 2010, p.4). Besides the fact that the social media can be used for the dissemination of information, they can also be used to interact with the public, which

is a new possibility the social media offer in crisis communication. In the following section it will be addressed which social media have been used to disseminate information in both cases and with which objective they have been used by the involved authorities. Next to this, it will also be addressed why it is from a democratic perspective important to be transparent in crisis communication.

The municipality of Moerdijk made use of different communication devices in order to inform citizens about the fire at Chemie-Pack. All of these devices have been used in order to achieve the three objectives of crisis communication; meaning, providing sufficient information and limitation of harm. Especially in the first phase of the crisis communication the municipality explains that providing sufficient information and limitation of harm are of interest. It is important to inform citizens about what is going on and what they can do in order to not be affected by the incident, for example let them know to close doors and windows (Interview 3). To achieve these three objectives of crisis communication the municipality of Moerdijk provided information on their website, on www.crisis.nl, press conferences have been held and press releases were given. Next to this, an information evening for local residents was organized and newsletters have been send to local residents (Interview 3). The social media however have not been used by the municipality in their so called communication mix. Although the municipality had an official Twitter account, they did not make use of it in their crisis communication for the fire in Moerdijk. The municipality of Moerdijk explains *“we had an active Twitter account which we were increasingly trying to deploy, but not actually in the event of a crisis”*. A combination of the underestimation of the popularity of the use of Twitter, especially in times of a crisis, with the lack of knowledge and experience with Twitter among employees of the municipality probably underlies this (Interview 3).

Besides the fact that the municipality of Moerdijk did not make use of the social media in their crisis communication, also the safety region, Midden- en West-Brabant did not make use of it. The safety region of Midden- en West Brabant had been active on Twitter before the fire at Chemie-Pack, but did not send any messages related to the fire via Twitter (Twitter MWB, 2012). The other involved safety region Zuid-Holland Zuid explains that they used Twitter primarily for sending information to citizens (Interview 6). Since the Twitter account of the safety region Zuid-Holland Zuid, @VRZHZ, did not have any followers at the time of the fire, they decided to use the Twitter account of the municipality Dordrecht, @GemDordrecht (Crisisplan BV, 2011, p.2).

A remarking event in the communication around the fire in Moerdijk is the active contribution of Crisiswerkplaats in the provision of information via the social media (especially Twitter). Because a lot of authorities weren't active on Twitter in the first hours after the fire started and there was a lot of unrest among citizens and Twitter users, Crisiswerkplaats decided to help with providing information on Twitter. Crisiswerkplaats explains *“there were a lot of rumors and a lot was going on. There was a call for information from the people in the country, under the smoke plume ... but I did not saw any information appear”*. Therefore Crisiswerkplaats decided to activate a Twitter account and to retweet messages of official authorities and messages which were referring to websites where official information could be found, Crisiswerkplaats explains *“factually we have send information around”*. By doing this Crisiswerkplaats hoped that they could help people in their search for information. Besides the first hours after the fire that Crisiswerkplaats was active on Twitter, they also set up an evaluation of the crisis communication in the week after the fire. Where Crisiswerkplaats was focused on bringing the outside world in and by doing this matching the

conducted crisis communication to the specific needs and questions of the public, they saw that the authorities in the Moerdijk case did not make use of this. Because of this they set up a questionnaire in which people could react on the crisis communication of Moerdijk and give recommendations for the authorities regarding crisis communication (Interview 1).

In contrast to the involved authorities in Moerdijk, already soon after the shooting incident in Alphen aan den Rijn the involved authorities were active on the social media, and especially on Twitter. Where the KLPD received an official report about the shooting incident in the shopping area at 12.09 hours, the first official message at Twitter from the authorities was posted at 13.26 hours with the Twitter account of the police Hollands Midden. A few minutes later, at 13.28 also the municipality of Alphen aan den Rijn was active on Twitter (Duin et al., 2012, p.146). The main three authorities that were active on Twitter in order to provide information about the incident were the municipality of Alphen aan den Rijn with the Twitter account @gemeenteraad, the police Hollands Midden with the account @PolitieHM and the Public Prosecutor (Openbaar Ministerie, OM) with the account @OMDenHaag (Duin et al., 2012, p.154-155).

A notable occurrence to mention is the fact that the Twitter account of the municipality of Alphen aan den Rijn in total send 120 messages about the incident via Twitter, from which 84 messages were send in the first two days after the incident. The police Hollands Midden send in total 49 tweets, from which 15 messages were from themselves and 34 messages were retweets mostly from the municipality. The number of followers of the municipality of Alphen aan den Rijn increased from 600 till 2600 followers in the first hours after the incident occurred (Duin et al., 2012, p.158). In the report 'Lessen in crisisbeheersing' it is stated that the municipality has deliberately chosen to publish only two press releases. In the opinion of their communication experts press releases were obsolete and very time consuming, since they first needed to be approved by the policy team (Duin, 2012, p.154). This development is a good example of the increasing popularity and importance of the social media nowadays which is recognized by the municipality of Alphen aan den Rijn at the time of the incident.

Besides the three official authorities which were active on Twitter, also employees of the safety region Hollands Midden were active on Twitter in the hours after the incident. Although the Twitter account of the safety region @VRHM was not active at the moment of the incident, employees of the safety region were active on Twitter by means of their personal accounts. They did not post any new messages, but were active on the social medium by retweeting messages from the municipality, police and the Public Prosecutor. Retweeting official messages is an important mean to increase the scope of the information (Interview 4). Also Crisiswerkplaats played an important role on Twitter, like they also did during the crisis communication of the fire in Moerdijk. The Twitter account @Cwerkplaats has sent 168 messages related to the incident, these messages were mostly retweets of the official information sources and news media. Besides the fact that Crisiswerkplaats contributed by sending and retweeting messages, they also selected relevant expressions of the public which could be of interest for the authorities in their environmental analysis (Duin, 2012, p.158).

In the report 'Lessen in crisisbeheersing' it is stated that the starting point of the crisis communication by the municipality of Alphen aan den Rijn was to communicate that what is actually observable. Examples are when the media showed videos of 'men in white suits' or the mayor of

Alphen aan den Rijn had publicly said something, this would also be communicated by the communications department via the (social) media. This however would not be done when it was related to information about numbers or personal information of victims. The procedure was that once the head communication came back from a meeting with the policy team and informed the head action center about the important issues, the web editor immediately placed a message with all the actual information discussed in this meeting on the website of the municipality of Alphen aan den Rijn and on the Twitter account of the municipality (Duin, 2012, p.153).

By doing this, the social media could be used as a mean to achieve the objectives of crisis communication. First of all the social media have been deployed to provide citizens with information about the situation (as is being discussed before). The second objective, meaning, has primarily been achieved by letting the mayor of the municipality of Alphen aan den Rijn inform citizens about the impact of the shooting incident for the community of Alphen aan den Rijn. Although the social media can contribute in achieving this objective, one is aware of the fact that a mayor who is telling citizens (instead of a small message on for example Twitter) what the incident means for the society, is more effective and with higher credibility. Especially after an incident like the shooting incident with enormous emotional impact, one can not underestimate the fact that citizens need a spokesperson who informs them about what has happened, what it means for them and what will be done in order to solve the crisis. The third objective, limitation of harm, has been achieved by informing citizens via for example Twitter about the situation and provide them with an action perspective. Not only in the acute phase of the incident the authorities made use of the social media to inform citizens, also in the days after the incident they did. They for example let citizens know where they could get professional help and informed them about the location they could go to for a personal conversation (Interview 4).

In the crisis communication of the Alphen aan den Rijn case special attention has been given to rumor control. The social media make quick dissemination of rumors possible and a lot of people can be reached with it. Because of this a lot of people could be informed about a possible rumor and it was important to scan for possible rumors and contradict them as soon as possible before too many people were informed about the rumor. To accomplish this the municipality and the press media placed messages on Twitter with factual information to give an answer to the rumors which were circulating. One of these messages refers to the rumor that there was a second perpetrator. The response of the authorities to this rumor was by the message: *'Update: geen tweede dader, kind in rug geschoten (niet overleden), persconferentie om 14.30 uur. #schietspartij (14.26 uur)'* in which they state that there is no second perpetrator, a child has been shot in the back but is not deceased and a new press conference will be given at 14.30 hours (Duin et al., 2012, p.150). Also when there were rumors about other bombs in the other shopping areas in Alphen aan den Rijn, the authorities informed citizens about this and informed them to stay away from these shopping areas until more information was given. By doing this they contributed to achieving the objective of limitation of harm in crisis communication and it appears that the social media indeed are a good and effective mean to achieve this objective (Interview 4).

Although the social media are an effective mean in order to contradict rumors which are circulating, the difficulty in the use of social media in order to accomplish this is in the range that one is dependent on the amount of times the message will be retweeted. Of course there is still the danger that the message with the rumor will be retweeted many more times than the correction of that

previous message by the authorities and more people will be informed with the rumor instead of the message with the actual situation. In order to make sure that the scope of the messages sent by the authorities is as big as possible, it is important that the official Twitter account of for example a municipality, or the police in times of a crisis, is already active before a crisis starts and that it has already collected many followers (Interview 4). This also corresponds to the synthesis model of crisis communication of Horsley and Barker (2002), discussed in the theoretical framework of this research, in which they urge that it is important to already prepare for a possible crisis with all of the possible involved actors in the crisis communication of an incident. In this case this would mean that the involved authorities have made agreements about which Twitter account will be the official account in the crisis communication and who will be responsible for this account. The one responsible for this account is in this manner not only responsible for disseminating updated information via the account, but also for collecting as many followers as possible prior to a possible crisis.

But why is it important for the authorities to make use of the social media in crisis communication? First of all because of the reason that the use of the social media can contribute in meeting the three objectives of crisis communication (meaning, providing sufficient information and limitation of harm). Besides this, the social media are an easy and quick manner to distribute information to the public, which is in line with the principles of crisis communication (openness, honesty and speed). When focusing on this first principle of crisis communication, openness, it can be stated that the social media can be a good mean to accomplish this principle since the social media can be of help in making the performed crisis communication more transparent. When up to date information is distributed via the social media, the public stays informed about the status of the incident. This also includes that authorities can inform citizens about what they are exactly doing to combat the crisis. For example when an answer cannot be given yet, it is important to inform the public that you are working on giving an answer on a later moment. By doing this, the public is aware of the fact that the authorities are working on things which will eventually increase people's opinion about the performed crisis communication. From a democratic perspective the legitimacy of the performed crisis communication can be increased, which will be addressed in more detail later on in this chapter.

5.3 The role of social media in crisis communication plans

In the theoretical framework of this research attention has been paid to the synthesis model of crisis communication of Horsley and Barker (2002). In this model they emphasize the importance of cooperation in crisis communication in the public sector. This cooperation can be done in the three phases of a crisis, from the pre-crisis phase till the after-crisis phase (Horsley & Barker, 2002, p.426-428). For this research it is important to determine to what extent the social media have been included in the crisis communication plans which have been made for a possible crisis in both regions. In this section insight will be given in the role of the social media in these crisis plans for both of the cases.

As well as in Moerdijk as in Alphen aan den Rijn it became clear that one was working with outdated communication plans that (almost) did not pay attention to the role of the social media in crisis communication. The municipality of Moerdijk explains *“at the time of the fire at Chemie-Pack there was a crisis plan, which came from the safety region, in which the social media did not have any role.*

It was a outdated plan actually. This plan was available and everything was well arranged, but the new media devices were not taken into account in this plan” (Interview 3).

Also in Alphen aan den Rijn one was at the time of the shooting incident working with an outdated crisis plan and although a start has been made on establishing a new regional crisis plan, this plan was not implemented yet. The municipality of Alphen aan den Rijn explains that also the municipality of Alphen aan den Rijn was previously working with an outdated crisis plan, but at the time of the incident already several improvements had been made to this previously outdated plan. Though these improvements were primarily focused on duties and responsibilities, rather than on means (Interview 5). Also the safety region Hollands Midden confirms that the social media did not have a role in the previous crisis plans at the time of the shooting incident. It is being explained that although the new regional crisis plan still had to be made at the time of the incident, they already started a year and a half ago talking about how crisis communication in the region should look like. The region in this case refers to the 25 municipalities, the emergency services and the Public Prosecutor (OM). Besides this, already several employees went to trainings related to the implementation of crisis communication. This resulted in the fact that although the new crisis plan was not implemented yet and no social media policy was there yet, everybody was broadly familiar with the new plan and the possibilities of including the social media in crisis communication. Because of this one was able to act corresponding with this new crisis plan although it was no official plan yet (Interview 4).

It becomes clear that as well in the Moerdijk case as in the Alphen aan den Rijn case the social media did not play a specific role in the crisis communication plans which were active at the time of both incidents. Most of these plans were outdated and one was at the time of the incidents working on innovations in the form of regional crisis plans. In the Alphen aan den Rijn case this resulted in the fact that although the social media were not included in the official crisis plan, one was aware of the role the social media could play and already applied this to the crisis communication of the shooting incident.

5.4 Effects of the use of social media in crisis communication

With the use of social media in crisis communication several effects can be involved. Several positive effects, but also negative effects can be distinguished from the use of the social media in crisis communication. In this section these possible effects coming from the use of social media in crisis communication will be discussed.

How people judge the crisis communication being performed has been discussed previously but will be taken in more depth right now since it is an important aspect of crisis communication from a democratic point of view. What we see in the Moerdijk case is that the social media have first of all not been used to collect information and with this provide input for the environmental analysis. The fact that the social media also have not been used in order to inform citizens about what was going on, led to enormous social unrest. Of course not making use of the social media was not the only cause of this, for example also the fact that no information was given at all had an influence on the social unrest. The Alphen case on the other hand shows that the social media can be used in order to collect input for the environmental analysis and to provide citizens with information about the situation. Even at moments when no information can be given, it is important to at least give process information, or information about what you are doing at the moment in order to answer specific

questions in the near future. This relates to the transparency of the crisis communication being performed. By providing process information citizens are aware of the fact that you are working on things and they can to a certain extent be reassured (Interview 7). At this moment it is difficult to determine to what extent the use or not use of social media has an influence on the opinion of the crisis communication by the public, since also other factors affect the negative opinion about the crisis communication in the Moerdijk case. What however became clear in the analysis is the fact that the social media are a useful and important addition to the communication mix and cannot be ignored any longer. Based on this there are indications that there indeed is a relation between the use or non use of social media in crisis communication and the public's opinion about the crisis communication.

Another positive effect is that the social media, and especially Twitter, make interaction possible. This means that the authorities are able to interact with the public in their crisis communication and by doing this provide quick answers to the questions people have. Although the authorities in the two analyzed cases did not make use of interacting with the public, they are indeed aware of this possibility. The reason way no use has been made of interaction is mostly explained by the hectic situation one was in, especially at the acute crisis phase. Besides this it is important to have sufficient staff in order to be able to interact with the public. The authorities of both cases explain that at the acute phase of the incident there was a lack of sufficient staff (Interview 6). At the acute phase of an incident it might also be possible that specific information is still missing and therefore it is not possible to answer all specific questions. To provide as much citizens with the information you have, it is again important to provide process information. Process information refers to information about what you are doing at the moment in order to give an answer to certain questions later (Interview 7). By giving process information the public can see that you are working on it and this will also probably result in a more positive opinion about the used crisis communication. Besides this, interacting with citizens on the social media makes it also possible to quickly know which questions people have, but also getting to know which rumors might be circulating. By picking these rumors up in an early stage, you can contradict these rumors and make sure that the rumors will not escalate.

Interacting with the public on the social media is however not the only positive effect of the social media in crisis communication which can have an influence on the organization's image. As is being described previously in this chapter, the authorities can make use of the social media as input for their environmental analysis. By analyzing the (social) media it becomes possible to bring the outside world in, as is being discussed before. By doing this, the authorities can make sure that their crisis communication strategy is attuned to the needs of the public. By making sure the crisis communication is adapted to the public needs, this will eventually also have an influence on your image and the way the public judges about the crisis communication. Positive reputational effects for the involved authorities can be a result of this.

Besides the fact that the use of social media can have positive reputational effects for the involved authorities, the non-use or wrong-use of social media can also have negative reputational effects. This can for example happen because the crisis communication is not adapted to the specific needs of citizens since the social media have not been included in the environmental analysis. But it might also occur that although the social media have been involved in the environmental analysis, the crisis communication is not adapted to the specific needs.

The use of the social media in crisis communication can also bring some implications with it. The first implication refers to the fact that the social media can make it more difficult to disseminate unambiguous information, especially when multiple authorities are involved in the crisis communication like was the case in Moerdijk. When information is given in the (social) media it is extremely important to align this information and to make sure that the information which is given, is verifiable. By making information verifiable you also increase the reliability of the information which is given. Besides unambiguous information also the fact that by making use of the social media everyone has become a journalist can be a critical remark of the social media. This is especially the case when morals are at stake. Where journalists normally consider a moral assessment about whether or not they post a news item, a video or a picture, this assessment will not always be done by some citizens. This can result in the fact that people can be confronted with shocking news before they have heard about this by the official way, from the authorities.

Another effect of the social media is that with the increasing role of social media in incidents, the importance of the traditional media as provider of images has decreased. Where the role of the traditional media was primarily focused on showing videos of an incident, they are now more and more focused on researching the background of incidents. What happened in the Alphen case is that journalists already quickly after the incident focused on gathering information about persons related to the offender. In their search for information sometimes ethical considerations were considerable and sometimes even personal safety was compromised. The result of this new trend of gathering more background information also has consequences for the police. Where the role of the police was primarily focused on researching the incident, they now continuously have to pay attention to the messages and possible rumors which are circulating in the media. These messages needed to be falsified or confirmed in order to have the situation under control, which brings a certain pressure to the police in these situations (Duin et al., 2012, p.156).

Based on this there are indications that there is a relation between the use or non use of social media in crisis communication and the way the public evaluates this crisis communication. Although also other factors can have an influence on this relation, the analysis of the two cases shows that the crisis communication of the Moerdijk case is evaluated significant less positive as the crisis communication of the Alphen aan den Rijn case, where use has been made of the social media in the crisis communication. The use or non use of social media in crisis communication starts with including it in the environmental analysis, and by doing this adapting your crisis communication to the questions and needs of the public. Also interacting with citizens by making use of the social media make it possible to know which questions are circulating among the public and trying to provide the public with the answers they need. Besides the fact that including the social media in crisis communication offers a lot of opportunities and positive effects can be a result of this, also negative effects can be distinguished. One can think of the fact that the social make it more difficult to disseminate unambiguous information by several authorities which are involved in crisis communication. Also the fact that each citizen has become a journalist can be seen as a good development of the social media, however by this development it might occur that several norms and values are fading.

5.5 The use of social media in relation to democracy

Although the aspect of democracy has already been discussed shortly in the different sections of this analysis, it is however important to pay more in depth attention to this aspect. In the introduction

and theoretical framework it has already been addressed that taking a democratic perspective into account in crisis communication can be seen as a time consuming process. Especially since in crisis communication decisions need to be made quickly and are of great responsibility, one might think that taking a democratic perspective into account while making these decision is not effective. The analysis of this research however shows that also in crisis communication it is really important to keep this democratic perspective in mind. One of the most important reasons of doing this is based on increasing the public's satisfaction with the crisis communication being performed as a way to increase democratic legitimacy. Although directly involving citizens in crisis communication can be seen as a time consuming process, also other possibilities have been discussed previously to include the public's opinion in crisis communication. And although these different ways have already been addressed previously, this section will focus on the possibilities the social media offer in more depth and will also explain why it is important to include this democratic perspective in crisis communication.

The first opportunity the social media offer in crisis communication refers to interacting with the public and making use of the opinion of the public as input for the conducted crisis communication. First of all this can be established by directly interact with the public via the social media and give for example targeted responses to the questions the public have. Although this can be seen as an effective way, it is also a time and person consuming way since authorities need to have enough employees available to constantly be active on the social media to provide the public with answers to their questions. A second way to interact with the public and obey their needs is based on making use of the social media in the environmental analysis. By 'getting the outside world in' crisis managers are able to adapt the crisis communication to the specific needs of the public. Why is it important for crisis managers to do this from a democratic point of view? First of all it can be stated that with taking into account the questions and needs of the public and obey these needs, the public will have the feeling that they are being heard. This will eventually lead to a more positive judgment of the public about the crisis communication being performed. By doing this the democratic legitimacy of the conducted crisis communication can be increased, which means that the public accepts the crisis communication being performed by the authorities.

When the public does not agree with the crisis communication being performed, the public nowadays will inform the authorities about this for example via the social media, even when they are not being asked to do so. This is related to the fact that the social media make it possible (and more easier) for the public to give an opinion about something and share this with others. Where the public previously also could have an opinion about the conducted crisis communication, it is nowadays easier to disseminate this opinion to other users of the social media and with this possibly collect supporters for this opinion. By doing this, the public is able to exercise power in a certain way. For example in the crisis communication analysis of Moerdijk we see that the public was dissatisfied with the information provided by the authorities. This was also evident by the many messages on the social media referring to this. Where crisis managers or public policy managers could previously ask the public for their opinion, the public nowadays gives their opinion without they are being asked to do this. In the Moerdijk case the lack of information about the fire even attempted Crisiswerkplaats to an active contribution in the news coverage during the crisis till a couple of days after the crisis. This has been done by being active on Twitter with the account @Cwerkplaats which was used to disseminate the most useful actual information for the public. Also even a day after the fire a first article was written with an analysis of the needs of the public at the time of a crisis where the

warning- and alarmsystem is deployed (Crisiswerkplaats, 2011, p.3). This initiative can be seen as an example of citizen initiative, since Crisiswerkplaats was not asked by the authorities to help in the crisis communication. For the authorities this was also a good signal that the conducted crisis communication, and especially providing unambiguous crisis communication, was not adequate. In this case it is important as an authority to be aware of these developments in the social media and adapt your strategy to this. When one is focused on what is going on at the social media, one is able to locate these occurrences in an early stage before they will escalate and do something about it. By doing this in an early stage, you might be able to limit the reputational damage which is caused by not adapting the crisis communication to the needs of the public.

From a democratic perspective it is as well important to be as transparent as possible in crisis communication. The social media can be of help in establishing this since by making use of the social media (process) information can be given in short sentences at any time. By keeping the public informed on a timely basis, the public will have the feeling that the authorities are working on things and also then will possibly be more positive about the conducted crisis communication than if this is not the case. The Moerdijk case is in this regard a good example of how not well executed crisis communication feeds the displeasure of the public. Particularly because the questions of the public were not answered by the authorities about the fire. For example with regard to the release of toxic substances, uncertainty about the consequences of the fire for one's daily lives increased since no information was given about this by the authorities. Also the dissatisfaction about the actions of the mayor of Moerdijk increased, since he was responsible for the conducted crisis communication. Because of this dissatisfaction the mayor of Moerdijk decided in the aftermath of the fire to resign. To what extent the social media had a specific part in this is unclear. But it can be stated that the ignorance of the social media as input for the crisis communication was a contributory cause of the inaccurate crisis communication in Moerdijk. Based on this it can be stated that taking into account the opinion of the public is an important feature in the success of crisis communication.

5.6 Conclusion

Based on the news gathering part of crisis communication the analysis shows that there is a great difference between the Moerdijk case and the Alphen aan den Rijn case. Where in the fire in Moerdijk case only the safety regions paid attention to an environmental analysis in order to scan the (social) media for feelings and thoughts among citizens, in the shooting incident in Alphen aan den Rijn case all the involved authorities paid attention to this environmental analysis. By performing this environmental analysis, which consists of intensive following of the (social) media, one is able to adapt the crisis communication strategy to the specific feelings and thoughts which were prevalent at a certain moment. From a democratic point of view this is a positive aspect of the conducted crisis communication, since the public's opinion about the performed crisis communication will possibly be more positive since they have the feeling that they are being heard and one is giving attention to their specific questions and needs. With this the legitimacy of the crisis communication being performed can eventually be increased which is from a democratic point of view a positive feature of the use of social media in crisis communication.

The use of the social media in crisis communication is important because it can contribute in meeting the three objectives of crisis communication (meaning, providing sufficient information and limitation of harm). Where the analysis shows that in the Moerdijk case the focus of the authorities was primarily on making use of the traditional media devices in their crisis communication, with the

exception of the safety region Zuid-Holland Zuid which distributed information about the fire via the Twitter account of the municipality Dordrecht, the crisis communication in the Alphen aan den Rijn case was also conducted by making use of the social media. The analysis shows that the social media are an easy and quick manner to distribute information to the public, which also is in line with the principles of crisis communication (openness, honesty and speed). When focusing on this first principle of crisis communication, openness, it can be stated that the social media can be a good mean to accomplish this principle since. This includes that the social media can be of help in making the performed crisis communication more transparent. When up to date information is distributed via the social media, the public stays informed about the status of the incident. This also includes that authorities can inform citizens about what they are exactly doing. For example when an answer cannot be given yet, it is important to inform the public that you are working on giving an answer on a later moment. By doing this, the public is aware of the fact that the authorities are working on things which will eventually increase people's opinion about the performed crisis communication and increase the democratic legitimacy of the crisis communication.

In the analysis it became clear that as well in the Moerdijk case as in the Alphen aan den Rijn case the social media did not play a specific role in the crisis communication plans which were active at the time of both incidents. Most of these plans were outdated and one was at the time of the incidents working on innovations in the form of regional crisis plans. In the Alphen aan den Rijn case this resulted in the fact that although the social media were not included in the official crisis plan, one was aware of the role the social media could play and already applied this to the crisis communication of the shooting incident.

The analysis shows that the use of the social media in crisis communication brings positive as well as negative effects with it. Positive effects are that the social media make it possible to adapt the specific crisis communication strategy to the specific questions and needs of the public. This can on the one hand be done by making use of an environmental analysis and on the other hand by making use of the social media to interact with the public. By making the crisis communication transparent in this manner, the performed crisis communication will eventually most likely also be evaluated more positive and with this the democratic legitimacy of the crisis communication can be increased. But there is also a downside on this perspective. This is the case when the performed crisis communication does not take into account the questions and needs of the public, where public's opinion about the crisis communication will most likely decrease. Besides this the social media also make it more difficult for involved authorities to provide unambiguous information. Because of the speed of the social media it is very important in crisis communication to match the provided information by the different authorities to make sure that no ambiguity will arise.

6. Conclusion and recommendations

In this research an analysis of the crisis communication of the fire in Moerdijk and the shooting incident in Alphen aan den Rijn has been performed in order to determine which role the social media can have in crisis communication from a democratic perspective. The most important findings of this research, based on the different sub questions which have been conducted for this research, will be presented in this section and special attention will be given to the recommendations which are coming from the findings of this research. At the end of the section a critical eye will be cast in this study and some points of improvement will be given.

6.1 Conclusion

In this research the fire in Moerdijk and the shooting incident in Alphen aan den Rijn have been analyzed in order to determine which role the social media can have in crisis communication from a democratic perspective. This role has first of all been determined by focusing on which role the social media can have in the information authorities gather about a specific incident, or more specific, to what extent authorities focus on the information the public publishes on the social media about an incident. Also the information authorities send to the public about the incident and which specific social media tools have been used to do this are analyzed for both cases. Besides the actual social media means which have been used in the crisis communication, also the role the social media have in crisis communication plans set up by authorities in advance of an incident have been analyzed. It has been determined to what extent these plans are applied at the time of the incident and which possible adaptations have been made to these plans. The last focus in this research has been on the effects which can be distinguished from the use of social media in crisis communication and how the use of the social media in crisis communication relates to democracy, and more specific democratic legitimacy.

An analysis of the two incidents shows that immediately after both incidents occurred a lot of information was circulating on the social media about the incidents. Analysis of Ranter (2011) shows that only on Twitter approximately 118.000 tweets have been sent about the fire in Moerdijk and approximately 70.000 tweets about the shooting incident in Alphen aan den Rijn (Ranter, 2011). The extensive amount of tweets about the incidents immediately shows that the role of Twitter in crisis communication cannot be ignored nowadays. Because of this increasing popularity it is also for authorities important to pay attention to the role of Twitter and the other social media in their crisis communication.

The analysis shows that where the municipality of Moerdijk did not pay attention to the social media, the involved safety regions in that case paid little attention to it, in contradiction to the shooting incident in Alphen aan den Rijn case where the involved authorities did pay attention to the social media as part of their crisis communication. Authorities can do this by following the messages on Twitter posted by the public, which can then be used as input for their environmental analysis. By making an environmental analysis and checking what kind of information the public is asking for, the authorities are able to get the outside world to the inside. By focusing on the specific questions and needs of the public, authorities are able to adapt their crisis communication strategy to these specific needs of the public. From a democratic perspective it can be stated that using the information obtained via the social media for an environmental perspective is important because it can increase the legitimacy of the crisis communication being performed. When the public has the idea that their

questions and/or feelings are being heard, they most likely will have a more positive opinion about the crisis communication being performed. To what extent the environmental analysis is actually used as input for the conducted crisis communication strategy is however of influence on this opinion of the public.

Following the social media in order to adapt the crisis communication strategy to the public needs is not the only role the social media can have in crisis communication. Where crisis communication can be deployed for achieving several objectives; meaning, providing sufficient information and limitation of harm, the social media can contribute in achieving these three objectives. From the analysis it became clear the social media are a good addition to the instrument mix which authorities can use in their crisis communication and with this achieving the three objectives of crisis communication. Besides this, the social media are an easy and quick manner to distribute information to the public, which is in line with the principles of crisis communication (openness, honesty and speed). The social media and especially Twitter can be used to provide citizens with information about a specific incident. This can be done by making use of short messages on Twitter with specific information, or by referring in these messages to websites where more information can be found related to the incident. When focusing on the first principle of crisis communication, openness, it can be stated that the social media is in accordance with this principle since the short messages can give the public information about the status of an incident and the actions which are being taken to deal with the situation (also called process information). By doing this the social media can be of help in making the performed crisis communication more transparent. When up to date information is distributed via the social media, the public stays informed about the status of the incident. This also includes that authorities can inform citizens about what they are exactly doing. For example when an answer cannot be given yet, it is important to inform the public that you are working on giving an answer on a later moment. By doing this, the public is aware of the fact that the authorities are working on things and this will eventually increase people's opinion about the performed crisis communication. Because of this it is also from a democratic perspective important to make use of the social media to constantly keep the public informed about the incident and be as transparent as possible in crisis communication. This can eventually increase the public's opinion about the performed crisis communication and with this the legitimacy of the crisis communication.

Although there are indications that there is a relation between the use or non use of social media in crisis communication and the way the public evaluates this crisis communication, also other factors can have an influence on this relation. The analysis of the two cases shows that the crisis communication of the Moerdijk case is evaluated significant less positive as the crisis communication of the Alphen aan den Rijn case, where the social media have been used. The use or non use of social media in crisis communication starts with including it in the environmental analysis, and by doing this adapting your crisis communication to the questions and needs of the public. Also interacting with citizens by making use of the social media make it possible to know which questions are circulating among the public and trying to provide the public with the answers they need. Besides the fact that including the social media in crisis communication offers a lot of opportunities and positive effects can be a result of this, also negative effects can be distinguished. One can think of the fact that the social make it more difficult to disseminate unambiguous information by several authorities which are involved in crisis communication. Also the fact that each citizen has become a journalist can be

seen as a good development of the social media, however by this development it might occur that several norms and values are fading.

6.2 Recommendations

As the popularity of the social media is still increasing it is important for authorities in the public sector to pay attention to the role the social media can play in crisis communication. Although the social media will in all probability not totally replace the traditional media means, they are a good addition to the instrument mix in crisis communication with an increasing degree of importance. The first most important recommendation coming from this research is that especially from a democratic point of view it is important to adapt the crisis communication strategy to the specific questions and needs of the public. This first of all can be done by making use of the contribution of the public on the social media as input for the environmental analysis on which the crisis communication strategy can be based. But this can also be done by actively interact with the public and be there where the discussion is located. If a discussion is located on the social media, it is important for the authorities to also be active on the social media which means that authorities (and more specific employees of the communication department) should have an Twitter or Facebook account ready in order to be able to participate in a possible discussion at the time of the crisis. In the next paragraph this will be discussed further. By being active on the social media it will be possible to locate rumors in an early stage and confirm or refute them. Refuting rumors and giving an answer to questions can not only be done by answering on the social media, but can for example also be done by providing an answer in press releases or press information sessions. The most important aspect in this is that the crisis communication strategy is adapted to the needs of the public, this will eventually lead to a more legitimate crisis communication.

In order to make sure that you as an authority are able provide quick and sufficient information at the time of an incident and be there where the discussion is located, it is important that the communication department is active on the social media and has the needed expertise. First of all it is important to have a crisis website ready and a Twitter and Facebook account with sufficient followers. If these accounts still needs to be made when a crisis has already occurred, the effectiveness of sending information by for example Twitter will in all probability decrease since the Twitter account has not enough popularity. If the popularity of the Twitter account is very limited this will probably result in the fact that not as many people as possible will be provided with the information which is given. Since the use of the social media in crisis communication requires that one can send messages quickly, it is also very important that the employee of the communication department which is responsible for the use of the social media, for example the Twitter account, has the mandate to publish information about the incident on the social medium. Especially since the social media require a rapid response, it is important that the one who is in charge of manning the Twitter or Facebook account, has the mandate to disseminate information about the incident.

Besides the fact that a Twitter account should be active already before an incident occurs, it is also important to make sure that all the information you provide, independent of the communication source used, is verifiable. Making information verifiable increases the credibility of the provided information and also makes sure that the public knows that the information is provided by an official authority. This recommendation is, especially when multiple authorities are involved in crisis communication, in line with the synthesis model of Horsley and Barker (2002) in which they focus on cooperation. In order to make sure that the information which is provided is verifiable, it is important

to prepare with the involved authorities for a possible incident and make agreements about how the crisis communication and which communication instruments will be used. These agreements can help in making sure that each authority, each website and each social medium provides citizens with the same information.

6.3 Discussion

At the end of a study it is important to be critical about the set up of the research which has been conducted and to think about improvements for the research. When looking back on conducting this research there are three important things that can be improved when doing this research all over again. The first is the fact that although the theories which have been used in the theoretical framework of this research are a good basis to analyze the crisis communication of an incident, the crisis response strategies theory of Coombs (2007) is less applicable for analyzing crisis communication in the public sector. Coombs response strategies are primarily focused on reputational effects of an organization and during the interviews it became clear that public authorities are, especially at the acute crisis phase, not focusing on reputational effects. The most important goal of crisis communication in the public sphere is, especially at the acute crisis phase, to provide the public with as much information as possible about the incident. One is at that acute time not thinking about protecting its reputation, since this is not the goal of the crisis communication. Because of this reason the theory of Coombs can be seen as a good guideline for analyzing crisis communication in the private sector, but when one wants to apply it to the public sector the focus should not primarily be on the acute crisis phase, but also on the after crisis phase when one is more concerned with reputational effects and probably more focusing on these crisis response strategies.

The second point of improvement relates to the fact that only two incidents and their crisis communication have been analyzed in this research. The first case is an example of crisis communication where no to limited use has been made of the social media and the other case is an example of crisis communication where use has been made of the social media. Of course the comparison of these two cases can give a good view of the role the social media can have in crisis communication. It would however also be very interesting to compare several cases with each other in which all use has been made of the social media in the crisis communication. An example of another case which can be selected is the incident at the music festival Pukkelpop in Belgium in 2011. Also this incident is a good example of the recent power of the social media in crisis situations. The enormous amount of messages in the social media were related to different categories like reporting, opinion posts, obituary notices and even emergency messages based on which festival goers could try to get in contact with friends they had lost in the chaos (Van Peteghem & Caudron, 2011). But also the recent Facebook party in Haren in the Netherlands that got out of hand can be of use in further research, since this case shows the enormous power the social media can have in the mobilization of people. With regard to crisis communication it will be very interesting to determine to what extent the authorities themselves can make use of the social media to counter such a call for a party. By comparing all of these cases it might be possible to get more specific insight in the different roles the social media can play in crisis communication since the social media can be used in different ways.

The third and last point of improvement relates to the aspect of democracy which has been used in this research. More specific a democratic legitimacy focus has been used to obtain more insight in the role of social media in crisis communication. When focusing on democracy, one can distinguish

several aspects of democracy. This has also been addressed in the theoretical framework of this research. Besides democratic legitimacy, one can also focus on democratic decision making, a democratic society (the sociologic perspective) or on democratic citizenship. Although these perspectives have not been taken into account in this research, they might be useful to take into account in further research into the role of social media in crisis communication. Where the focus in this research has been on how the public will evaluate the performed crisis communication and how the democratic legitimacy of this crisis communication can be increased by making use of the social media, it might also be interesting to focus on how the public can more concrete be included in the crisis communication in order to make this crisis communication more legitimate. Especially because citizen involvement can be associated with a time consuming process it might be interesting to determine how this relates to crisis communication which is a process in which one needs to act quickly.

When looking back at this research it can be stated that the social media are a good and indispensable addition to the instrument mix of authorities in crisis communication. Duin et al. (2012) state that pessimists see the social media as a threat for crisis communication since they make it possible for rumors to be disseminated easily and very fast as never was able before. In addition to this they state that it is very difficult to hold grip on the (external) communication. Based on this research it can be stated that the arguments of the pessimists of the use of social media in crisis communication are indeed valid arguments, but authorities can also easily do something about this in order to make sure that negative effects of the social media can be limited. Although authorities indeed can never totally counter rumors, they are however able to limit them. This can be done by being active on the social media and by doing this, locate rumors in an early stage and refute them whenever they are not grounded. Also with regard to holding a grip on the (external) communication it can be stated that authorities are able to affect the exercise of this. This can be done by providing as much information as possible about the incident in the (social) media. Also when no answer can be given yet, inform the public that one is working on giving an answer. By being as transparent as possible in crisis communication, one will be able to not let rumors and wrong stories about the incident arise because of the fact that no information is given at all.

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Appendix

List of correspondents interviews

Interview 1

Ina Strating

Buro Communicatiezorg

Date of contact: 12-6-2012

Telephone interview

Interview 2

Maarten Dewachter

Safety Region Midden- en West-Brabant

Date of contact: 13-6-2012

Location: Tilburg, Safety Region Midden- en West-Brabant

Interview 3

Rob van Gool

Webmaster Municipality Moerdijk

Date of contact: 13-6-2012

Location: Moerdijk, Municipality of Moerdijk

Interview 4

Eric Seugling

Senior Communication Adviser Safety Region Hollands Midden

Date of contact: 18-6-2012

Location: Leiden, Safety Region Hollands Midden

Interview 5

Rosemarijn Lamers

Communication Adviser Municipality Alphen aan den Rijn

Date of contact: 22-6-2012

Contact by email

Interview 6

Leo den Otter

Senior Communication Adviser Safety Region Zuid-Holland Zuid

Date of contact: 27-6-2012

Location: Dordrecht, Safety Region Zuid-Holland Zuid

Interview 7

Eva Barneveld

Nationaal CrisisCentrum

Date of contact: 4-7-2012

Location: Den Haag, Nationaal CrisisCentrum