



MASTER THESIS

THE IMPACT OF THE PUBLIC DISCOURSE ON SOCIAL MEDIA IN TRANSBOUNDARY CRISIS MANAGEMENT:

THE RHINE FLOODING OF JULY 2021

Abstract

The nature of crisis and crisis management is changing. Since the turn of the century, multiple transboundary crises have taken place. The SARS outbreak in 2003, the eruption of the Eyjafjallajökull volcano in Iceland in 2010, and more recently, the COVID-19 pandemic. Moreover, the media landscape has changed over the last decades as well. Social media has become an integral part of modern society and everyday life. As such, it has also become an integral part of crisis management. The public discourse displayed on social media offers challenges and opportunities for crisis managers to explore and exploit. This paper researches the impact of the public discourse on social media on the transboundary crisis management of the Rhine flooding of July 2021 along the Dutch-German border. Almost 250 tweets were collected and analyzed by identifying frames, which enabled the construction of an overview of the public discourse of the Rhine flooding of July 2021. Furthermore, expert interviews were conducted. Ultimately, it was concluded that the public discourse of the Rhine of July 2021 centered mostly around the human-interest frame and the identification frame and thus around emotions, feelings, updates, and information related to the flooding. Concluding, this paper argues that the public discourse on social media can help smoothen the transboundary crisis management process by including certain frames in the accounting, response coordination, and meaning-making stage of crisis management.

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List of abbreviations

ACW	Actie Centrum Water
DWD	Deutsche Wetter Dienst
EFAS	European Flood Warning System
EMRIC	Euregio Meuse-Rhine Incident Control and Crisis Management
ICPR	International Committee for the Protection of the Rhine
KP	Kölner Pegel
LANUV	Landesamt für Natur, Umwelt und Verbrauchers
MoWas	Modular Warning System
NAP	Nieuw Amsterdams Peil

NRW	Nordrhein Westfalen
RLP	Rheinland-Pfalz
TC	Transboundary crisis
TCM	Transboundary crisis management

1. Introduction

Between the 12th and 19th of July 2021, intense rainfall, caused by the low-pressure system “Bernd”, led to severe flooding in Belgium and Germany and elevated water levels in the Netherlands (Thieken et al., 2022). The consequences of these floodings were, and in some cases still are, catastrophic. Over 200 lives were lost, infrastructure came to a standstill or was destroyed, houses were lost and damage was done to the commercial, industrial, and public sectors. In some areas, the intense rainfall could be classified as a flood that only occurs once every ten thousand years. One of the rivers that flooded was the Rhine. The Rhine rises high in the Alps in Switzerland and flows through Germany to its estuary in the Netherlands. Especially in Germany and – although to a lesser extent, the Netherlands – the Rhine flooded and caused problems. Floods can be considered crises if there is loss of human life, if infrastructure comes to a standstill and when there is an urgent need for evacuation of livestock and humans. Since this all happened during the Rhine flooding of July 2021, it can be considered a crisis.

The shape and dynamics of crises are changing. Even though crises still threaten the functioning of life-sustaining systems, functions, or infrastructure, their causes and the courses of redress are often unclear. Moreover, nowadays crises easily cross all kinds of boundaries (e.g., geographical, legal, political, cultural, and public-private). This type of crisis is defined as a transboundary crisis (TC). Since the turn of the century, several TCs have taken place. The SARS outbreak in 2003, the volcanic eruption of the Eyjafjallajökull volcano in Iceland in 2010, and more recently the COVID-19 pandemic are just some examples (Allemanno, 2020; Boin, 2019). For crisis managers, these crises are the ultimate nightmare as they cross boundaries that are normally used to classify, contain and manage a crisis. TCs are characterized by a high degree of mobility, which allows them to easily cross these boundaries. The Rhine flooding of July 2021 is an example of a TC.

Due to the upcoming of social media, crises and transboundary crises are not only discussed on and influenced by traditional media anymore. Social media offers both benefits and challenges for citizens and crisis managers during crises. It enables a fast way of spreading (new) information about a crisis. In times where information changes quickly, as is the case with transboundary crises, it is important for providers to keep the information up to date to prevent misunderstandings. Social media can facilitate this (Gottlieb & Dyer, 2020). However, due to its 24/7 availability and easy access to social media, it can also influence transboundary crises in a bad way by presenting and spreading information about the crisis that might be incorrect. This for example happened during the Covid-19 pandemic, where the spread of misinformation led to parts of the public adopting inappropriate protective measures (Chen, Xiao & Kumar, 2022). To benefit from social media and to tackle the challenges it brings, social media has been included in the crisis management process and has become a useful tool in all stages of the process. Especially in the accounting and response coordination stage, social media offers challenges

and opportunities to crisis managers, due to the ability of social media to spread information and opinions quickly. On the one hand, social media can be used in crisis management to guide the crisis to a good end. But on the other hand, it also provides challenges to crisis managers when the public discourse on social media contrasts with that of the crisis managers. This study looks into how and to what extent the public discourse on social media can impact transboundary crisis management (TCM). This is done by a single case study of the Rhine flooding of July 2021. For this, a research question is formulated.

RQ: To what extent did the public discourse on social media impact transboundary crisis management of the Rhine flooding of July 2021?

To provide an answer to the research question, three sub-questions are as follows:

SQ1: How can the public discourse on social media impact transboundary crisis management?

SQ2: How was the crisis of the Rhine flooding of July 2021 managed across the border?

SQ3: What was the public discourse on social media during the Rhine flooding of July 2021?

The above sub-questions address how the public discourse on social media can impact transboundary crisis management, how the Rhine flooding of July 2021 was managed, and what the public discourse on social media looked like. In doing so, all aspects of the central question will be addressed: public discourse impact on transboundary crisis management, the transboundary crisis management of the Rhine flooding of July 2021, and the actual public discourse on social media about the Rhine flooding of July 2021.

2. Theoretical framework

To answer the sub-questions and eventually the main research question, it is necessary to discuss the main concepts and build a theoretical framework for this study.

2.1. Crises: defining and development

2.1.1. What constitutes a crisis?

In its broadest definition, a crisis is: “a serious threat to the basic structure of the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making critical decisions” (Rosenthal, Boin & Comfort, 2001, pp. 6). Following this definition, Rosenthal, Charles & Hart (2016) believe that every crisis is characterized by *threat*, *urgency*, and *uncertainty*. First and foremost, there must be a *threat* to a system vital for a functioning society. This can be, for example, security or public health. Often, these threats are not easily measurable in terms of physical or material damage (Boin et al., 2016). The second characteristic of a crisis is *urgency*. That is the urgency that comes with a specific threat. The level of urgency differs per crisis. A good example of this is climate change, which has significant consequences for later generations but not for current ones (ibid.). The third characteristic of a crisis is uncertainty. That is uncertainty about the nature of a crisis as well as its possible consequences (Boin et al., 2016). Instead of *uncertainty*, Dror (1999) rather talks about *inconceivability*. Dror refers to Karl Popper’s (1972) ontological argument by stating that: “logically present knowledge cannot know the contents of radically new knowledge. As our epoch is characterized by rapid transformations in knowledge with radical social implications” (Dror, 1999, pp. 151). A good example of the inconceivability of a crisis can be found in the 9/11 attacks. Afterward, many aspects of it were deemed conceivable such as the targeting of power symbols in the USA (WTC, Pentagon, and the White House area) and the use of so-called catastrophic terrorism (i.e. maximizing the state of anxiety by maximizing the number of innocent victims). However, what was inconceivable was the method used. Instead of using the most frightening ways of catastrophic terrorism - nuclear, biological, or chemical terrorism – which terrorists used in the years before in the Oklahoma City ordeal and terrorist attacks in Africa and the Middle East – they used an “old-fashioned” practice: hijacking planes (Rosenthal, 2003).

2.1.2. General trends in crises

In the last couple of decades, crises are experiencing some general trends. Firstly, the scope of the crisis is changing from a more bounded one to a more transboundary one. Crises seem to be accelerating, so they have become increasingly global, intertwined, and non-textbook (Lagadec, 2007, pp. 489). The causes and consequences of crises increasingly stretch across borders, making it harder and harder for crisis managers to tackle them. Furthermore, analysts argue that many of today’s crises like air pollution, organized crime, and viruses are transnational in nature. Precisely that dimension poses challenges to

administrations all over the world. (Blondin & Boin, 2020; Rosenthal, 2003). Part of this transnational character is caused by globalization and the modernization of socio-technical systems. A socio-technical system is a system where both social (e.g., humans, roles, and rights) and technical aspects (e.g., hardware, software) are interdependent upon each other for the system to work. Examples include e-mails and social media sites. Socio-technical systems have become more complex and interconnected to other complex systems (e.g., food supply, transport, the internet), without being limited to regional or national boundaries (Perrow, 1984; Turner 1978 as cited in Boin, 2019). However, due to the interconnectedness of socio-technical systems, disruption can also quickly transfer from one system to another. This is also known as a “highway of failure” (Perrow, 1984, as cited in Boin, 2019). In short, this means that when a system becomes more complex, it also becomes more difficult to understand what is happening. In turn, this means that when disruption occurs, it is more difficult to understand what is happening. Before those system operators have found what is happening, the disruption might already have traveled to another system. This confusion is often due to a large number of actors being involved, vagueness in what information is known, and actors appearing and disappearing. As such, critical information is hidden in technical concepts, clashing paradigms, and different languages. Often, organizations try to solve these problems by investing in procedures, specialists, and technical equipment. Yet, these do not address a key weakness: the inability of people to translate operational information into strategic information and ultimately action. Since other systems (e.g., warning systems, and rescue services) are dependent on such information, failures and mistakes in the system were critical and were able to exploit the ‘highway of failure’.

Secondly, crises are now more than ever subject to politicization. For a long time, crises were depicted as malfortune, technical failures, or human errors. But by now, the full context of a crisis (e.g., conditions, characteristics, and consequences) is increasingly discussed in political terms. That is, not so much in ideological terms, but rather in who is held responsible and who believes a better job could have been done. In practice, this is often crystalized in blame-gaming in the media and investigations not only into the causes of the crisis but also into the quality of the crisis response and management (Rosenthal, 2003). An example of the latter is the blame gaming portrayed in German media after the crisis at the Love Parade in Duisburg in July 2010. Blame kept being shifted by all those involved (e.g., the organization, the police, and the Duisburg authorities) (Schwarz, 2012).

Third, crises have become mediatized due to the technological advances of the last century. The pivotal role of media in crises implies that if they define a situation as a crisis, it will be a crisis in all its consequences (Rosenthal, 2003). So, due to their influence (e.g., CNN), mass media controls what is labeled as a crisis and what is not. Moreover, the media can cover almost every part of the world and thus bridge the distance between the epicenter of a crisis and millions of people elsewhere. Confronted

with that, people elsewhere may fall prey to “collective stress and may sometimes yield to copycat behavior, thus importing the crisis from abroad” (ibid, pp.133).

Due to the abovementioned trends, the character of the crisis has changed. First of all, the scope of crises changes into a more transboundary one meaning that crises have become global and intertwined (Lagadec, 2007). Moreover, the ongoing urge of mankind to create more efficient systems has led to the creation of a complex system of interconnected systems (e.g., energy, internet). Second, the politicization of the crisis has led to a full-fledged discussion and blame-gaming of crises in the media. Third, the mediatization of crises and the ability of the media to cover almost every inch of the world has created a situation where a crisis on one end of the world can have consequences on the other end of the world. Combined, these trends enable crises to cross transnational boundaries and as such create a new kind of crisis: the transboundary crisis.

2.1.3. The transboundary crisis

As discussed before, general trends in crises have led to the development of the so-called transboundary crisis. TCs challenge administrations, institutions, and political leaders for multiple reasons. They have a complex causality, present nonlinear change, and have the potential to change today’s life (Galaz et al., 2011). This complexity is for example seen in the inability of local communities to respond quickly and well to a crisis, as well as in the difficulties experienced when informal social networks need to be formed when a formal crisis management structure is lacking (Quarantelli et al., 2006).

At the end of the first decade of this century, crisis management scholars (mostly Boin) introduced the concept of the TC to deal with a specific type of crisis. A crisis can be labeled a TC “when the functioning of multiple, life-sustaining systems, functions, or infrastructures is acutely threatened and the causes of failure or courses of redress remain unclear” (Boin, 2019, 368). This definition builds on the traditional notion of a crisis with its core elements of *threat*, *urgency*, and *uncertainty*. What makes it different, however, is the emphasis on the modern, tightly woven web of critical infrastructures that characterize contemporary society. TCs are characterized by a high degree of mobility, which allows them to easily cross all kinds of boundaries (e.g., geographical, legal, political, cultural, and public-private boundaries). Examples of TCs are the SARS virus outbreak in China in 2003 which caused major health crises in 37 countries, the banking crisis of 2008 which resulted in the downfall of several major economies around the world, and more recently, the Covid-19 pandemic which affected every country on the planet (Boin, 2019).

According to Boin (2019), TCs can be identified by five key characteristics. Firstly, they have *multiple domains and manifestations*. This means they have no clear geographical location or sector to organize. Take for example the war in Ukraine, which enhances or causes problems of hunger in Africa due to

discontinued supply lines of wheat and corn. As such, an armed conflict in one domain might become a problem of hunger in another.¹ Secondly, both *incubation and rapid escalation* play a role in TCs. They are characterized by a period of slow, sometimes almost undetectable, developments as well as periods of rapid escalation. A good example of this is the Covid-19 pandemic. In the beginning, it attracted limited attention from European policymakers, since it was a problem in Asia only. However, this quickly escalated when the virus set foot in Europe. Thirdly, TCs are *hard to chart*. That means that its causes, possible consequences, and escalation are very unpredictable. During the crisis, it is very difficult to install basic development. Fourthly, TCs have *multiple actors and conflicting responsibilities*. Since transboundary crises do not fall perfectly into one defined domain, there is also a problem with the division of tasks and responsibilities. This means the involvement of multiple actors that carry various responsibilities, which makes it unclear which actor is responsible for what task and who has the right capacity to perform a certain task. TCs blur the organization's boundaries, normally aiding an effective crisis response (ibid.). Fifthly, there are no *ready-made solutions* as they defy easy or conventional solutions. In sum, the combination of these five characteristics determines the character of a TC.

2.2. Transboundary crisis management (TCM)

Today's literature on crisis management is elaborate and widely available. However, research on TCM is still limited. Therefore, to build a theoretical framework for this thesis, literature is used from both crisis management and transboundary crisis management.

2.2.1. Crisis management

Starting, in her article on crisis management in hindsight, Comfort (2007) describes how crisis management evolves around three interacting factors: (1) *communication*, (2) *coordination*, and (3) *control*. These are all interdependent upon each other. So, if one factor is lacking, the whole crisis management process gets weaker. Communication in crisis management refers to the capacity of being able to create a shared meaning among individuals, organizations, and groups. Coordination in crisis management can be described as the alignment of one's actions with those of relevant other actors to achieve a common, shared goal. Logically, this is only possible if the process of communication is working well. If this is lacking and a shared understanding is absent, coordination between the actors is seriously diminished. Control in the context of a crisis is defined as having the capacity to focus on tasks critical to bring the crisis to a non-escalating state. In practice, this mostly refers to being focused on a shared goal, which usually is the protection of lives, property, and communities under threat (ibid.). To the above-mentioned factors, a fourth one is added by Comfort (2007): *cognition*. Cognition in this

¹ <https://www.trouw.nl/economie/oorlog-in-oekraïne-raakt-wereldwijde-voedselvoorziening-conflict-en-honger-gaan-hand-in-hand~b17a92b69/>

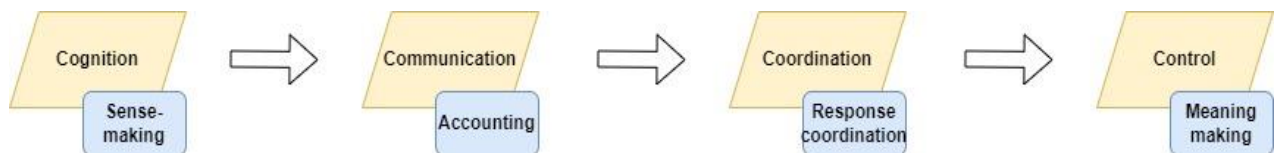
context refers to “the capacity to recognize the degree of emerging risk to which a community is exposed and to act on that information” (Comfort, 2007, pp. 189). Cognition is most important before a crisis. That is, recognizing an emerging crisis and acting upon that information. If cognition is not sufficiently present, the other three factors become static or even disconnected. As such, there is no clear assessment of risk and no clear, shared understanding of the situation which makes communication and coordination rather complicated. In turn, this makes it difficult or even impossible to decide what actions should be taken to keep control of the situation. However, if sufficiently present, the process becomes interactive and dynamic, in which stakeholders can perform well. The latter is necessary, as the environments of crises are complex and rapidly changing (Comfort, 2007). Since each factor is interdependent upon each other and factors need to be sufficiently present or executed, one could argue that Comfort’s (2007) four evolving factors of crisis management can be seen as stages in the crisis management process. That is, cognition is the first stage. When cognition is sufficiently present, it is followed by communication as a second stage. In turn, when carried out well, communication is followed by coordination in the third stage. Concluding, when coordination is successfully executed it is followed by the last stage, control. Like Comfort, Boin et al. (2016) also highlight the importance of communication, coordination, control, and cognition.

According to Boin et al. (2016), crisis management is based on five core tasks: *sense-making*, *accounting*, *response coordination*, *meaning-making*, and *learning*. Firstly, sense-making centers around collecting and processing information that is crucial for detecting an emerging crisis and understanding the significance of what is going on. Comparing this to Comfort (2007), it is similar to ‘cognition’. Both descriptions refer to detecting emerging crises and acting on the collected information for a smooth crisis management process. Therefore, it is argued that sense-making is part of the first stage of the crisis management process. Secondly, accounting explains to the public what was done to prevent and manage the crisis (e.g., why decisions were taken). This is done in a forum-like format and involves communication between decision-makers and the public. As accounting deals with communication with the public, it is similar to ‘communication’ as described by Comfort (2007). As such, it is argued that accounting is part of the second stage of the crisis management process as well. Thirdly, response coordination entails the making of critical calls on strategic dilemmas and the organization of a coherent response to implement the taken decision accurately. This fits with Comfort’s (2007) explanation of ‘coordination’, as both views refer to creating a coherent response that is to be shared by all involved actors. Since the similarities between response coordination and coordination as described by Comfort (2007) are clear, it is argued that response coordination is part of the third stage of the crisis management process. Fourthly, meaning-making focuses on the construction of a clear narrative of the crisis that is both convincing and helpful for citizens. When comparing meaning-making with Comfort’s (2007) definition of ‘control’, similarities can be seen. Both definitions refer to the construction of a clear narrative to inform and instruct actors and citizens. As such, both contribute to

managing a crisis towards a good end. Moreover, as both concepts are similar and control is seen as the fourth stage of the crisis management process, it is argued that meaning-making is part of the fourth stage as well. The fifth and last task refers to determining the cause(s) of a crisis, assessing the response, and undertaking remedial action based on that (Boin et al., 2016). Comfort (2007) did not add such an element in her view, but one could argue that it can be complementary to ‘control’ since it might bring new insights into how to control and manage a crisis.

Since this study focuses on the process of crisis management, specifically the communication part and not the evaluation part, it was decided to focus only on the key elements of crisis management as described by Comfort (2007), in combination with four of the core tasks from Boin et al. (2016). For this, Figure 1 below was constructed.

Figure 1: The crisis management process



As can be seen in Figure 1 above, this means that the four key elements from Comfort (2007) all are part of a specific crisis management stage: sense-making, accounting, response coordination, and meaning-making.

2.2.2. Transboundary crisis management

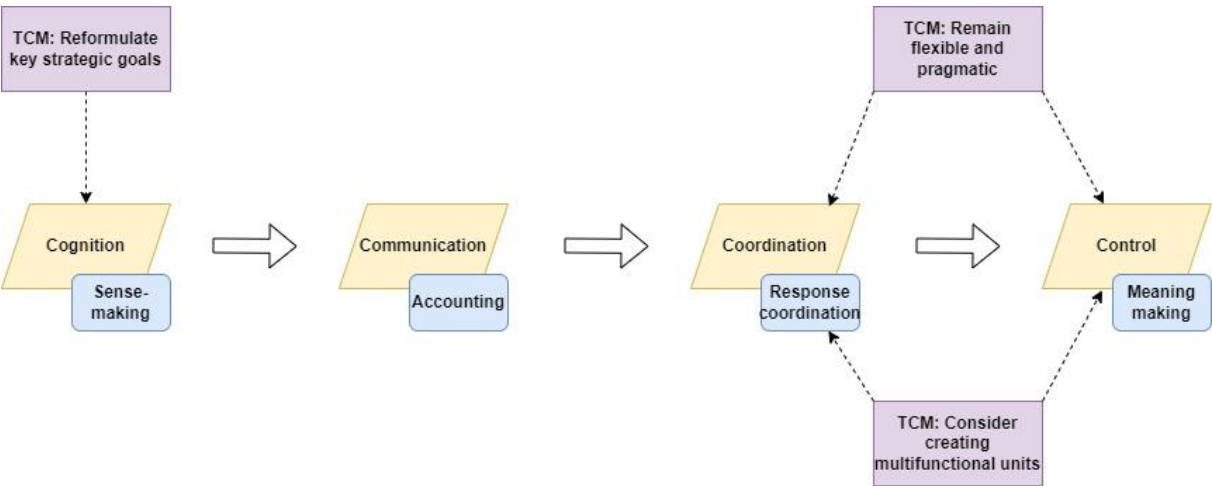
As outlined in chapter 2.1.3, TCs are characterized by their ability to easily cross, amongst others, geographical, legal, political, cultural, and public-private boundaries. This implies that the standard approaches for crisis management become much more difficult, as these are focused on crises in a national setting. Accordingly, trying to address TCs while holding on to domain-specific silos is deemed to fail (Moorkamp, Torenvlied & Kramer, 2020).

Moorkamp et al. (2020) propose a possible solution to this challenge in their paper on organizational synthesis and TC. Based on Thompson’s (1967) concept of the “synthetic organization” they introduce a process of organizational synthesis in which crisis managers balance centralization and autonomy by taking action following three key principles for successful TCM: (1) *reformulating key strategic priorities/goals*, (2) *flexible adaptation of crisis management control* and (3) *the emergence of multifunctional units*. To illustrate this, the example of the MH17 crash is used. Regarding the first principle, the Dutch cabinet quickly established the most important goals: repatriation of the victim’s remains, investigation of the crash, and bringing those responsible to justice. Flexible adaption of crisis

management control was established by flexibly using the already existing National Handbook Crisis Decision-Making. Certain elements of the book were emphasized and conceptualized, and others were deliberately not used. This resulted in the creation of the so-called “steering group MH17 recovery”. The latter consisted of many actors from different ministries which coordinated their efforts to govern the task force in Ukraine. By creating this steering group, the third principle was also established. The broad composition of the group dramatically improved coordination and accelerated the process of information-sharing (ibid.).

When addressing a transboundary crisis, crisis managers should take into account the key three principles from Moorkamp et al. (2020) to create a “synthetic organization”. More specifically, the first principle should be taken into account in the sense-making stage of crisis management. When collecting information and processing information about the crisis, crisis managers should always keep in mind their key goals. This to make efficient use of their resources for collecting information, to filter out information that is not useful, and to determine what are the best actions to take in accordance by their key goals. The second and third principles should be taken into account in the response coordination stage and the meaning making stage. By not only focusing on already existing crisis management plans or handbooks (regarding operational management and crisis communication) but by also daring to take decisions based on the situation at hand, crisis managers combine experience and resourcefulness. This contributes to more coherent and convincing response coordination and meaning making. Keeping in mind all three principles, crisis managers are better able to balance centralization and autonomy and are better equipped to tackle a transboundary crisis

Figure 2: The transboundary crisis management process



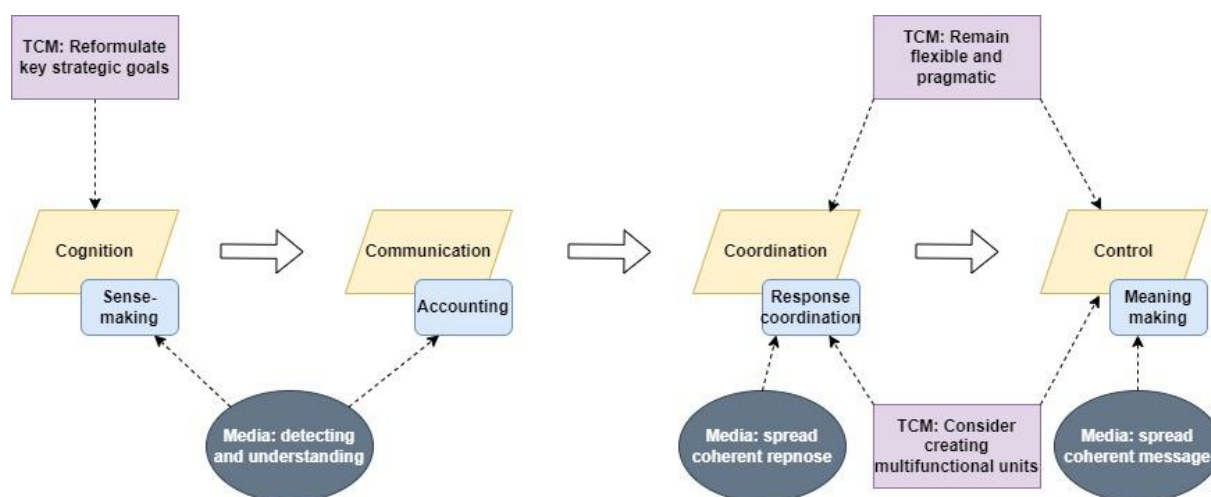
So, when taking into account the key principles introduced by Moorkamp, Torenvlied & Kramer (2020), Figure 2 can be constructed for TCM.

2.3. The role of media in crisis management

2.3.1. Media and crises

Due to its ever-increasing reach and influence in today's society, media have become inseparable from any social situation. Everyone, including policymakers and managers, can gather, accumulate and distribute information every moment of the day (Ghassabi & Zare-Farashbandi, 2015). Due to this, media has its effects on crisis management as well. According to Ghassabi & Zare-Farashbandi (2015), media can play a positive or negative role in crisis management. Positive, by spreading correct information quickly and to help solve the crisis. Negative, by enlarging the scope of the crisis and by framing the crisis in a harmful way. Reporters, journalists, and media experts are the bridge between the people and the government and must present accurate and updated information in times of crisis (Ghassabi & Zare-Farashbandi, 2015). By playing an active, positive role in crises, the media can have an instrumental role in solving the crisis. When looking at the stages of crisis management discussed in Figure 1, the media can contribute to all of them. First, in the sense-making stage, the media can contribute to detecting and understanding an (emerging) crisis better. By monitoring the media, crisis managers get an overview of what is seen by the public about a crisis and as such, it can help to understand the perspective of the public. In the accounting stage, media is helpful since it provides necessary information about how a crisis is framed and seen by the public. That information can then be used by the crisis managers to get a clear understanding of the situation. In the response coordination stage, the media can be used to create a more coherent response in the sense that media can be used to coordinate and instruct people. Moreover, it helps present an overview of who is in charge of what. In the last stage, the meaning-making stage, media is used to spread the complete narrative to inform citizens, and as such contributes to creating a collective and shared narrative among the public. The role of media in crisis management is displayed in Figure 3 below.

Figure 3: The media's role in transboundary crisis management



When combining the role of media with the transboundary crisis management process, the abovementioned Figure was constructed. Here, the role of the media in each of the stages is displayed.

2.3.2. Social media and crisis management: management process

In the last decades, the media landscape has changed (Saroj & Pal, 2020). The upcoming social media platforms such as Facebook and Twitter have altered the world of communication in such a way that almost every organization uses social media to communicate with its audience (Saroj & Pal, 2020). Moreover, social media has democratized the landscape by offering a new way of voicing opinions. By the creation of for example comment threads, user blogs, discussion spaces, and snap polls, social media offers opportunities not seen before to express opinions about all kinds of issues. Besides, many of these provide two-way communication, making discussions between and among politicians and citizens possible (Braun & Gillespie, 2011). On top of that is the fact that social media has accelerated the sharing of ideas and allows for a dynamic interaction between users (Miladi, 2016). With the coming of social media, the role of media in crisis management changed as well. Since 2001, social media have played a more and more important role in how people respond to and communicate during crises. Early examples include the use of web-based technologies by the Red Cross to spread information to the public after 9/11, the use of photo-repository sites after both the Indian Ocean Tsunami in 2004 and the Southern California wildfires in 2007, and the use of online sites to find people after Hurricane Katrina in 2005 (Reuter et al., 2018). Furthermore, an American Red Cross survey of social media usage in the US showed that 24 percent of the US population and 31 percent of the online population would use social media to let loved ones know they are safe during crises. This shows both the utility of social media and the lack of confidence in traditional ways of communication such as telephone calls, which are subject to network saturation (Blanchard et al., 2010). Also in more recent years, social media proved to be involved in crisis management. During the Ebola outbreak of 2014, the US Centers for Disease Control and Prevention used a Twitter conversation with the public to alleviate concerns and provide correct

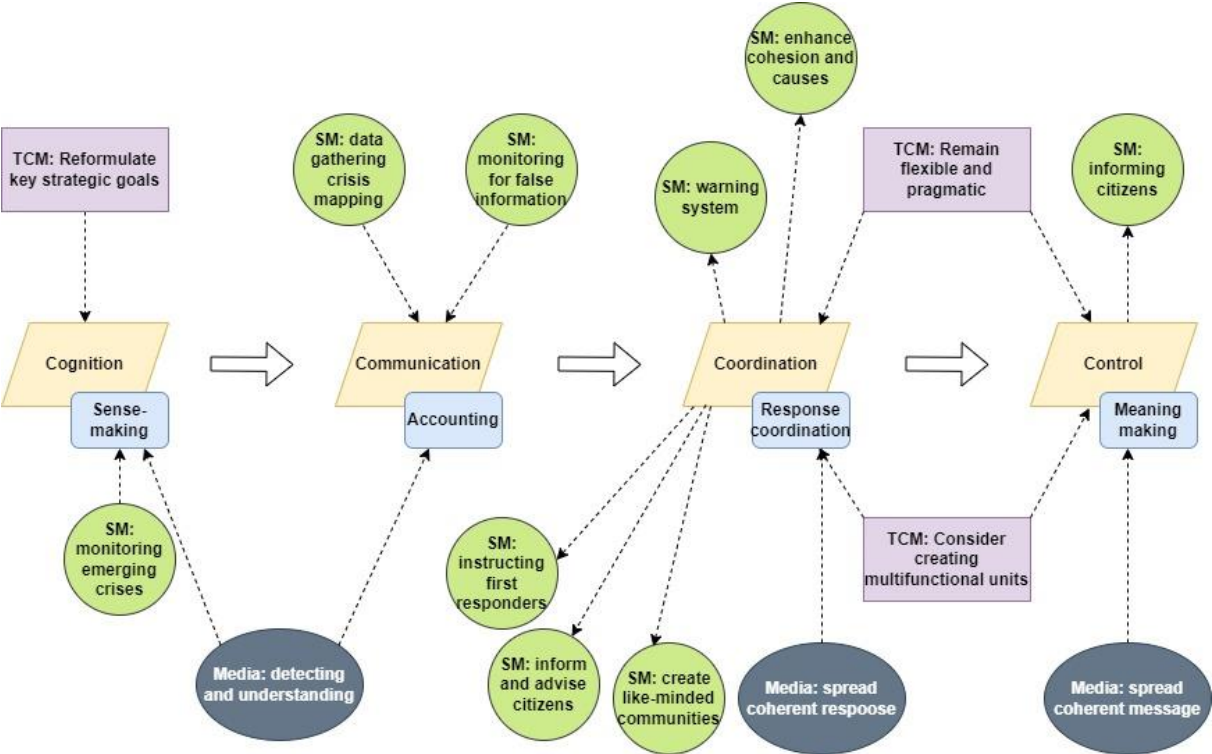
information (Crook et al., 2016). Moreover, during the COVID-19 pandemic many governments used social media to spread information and updates about the virus (London Jr & Matthews, 2022, Abbas et al., 2021; Chon & Kim, 2022). Concluding, governments and other crisis management agencies as well as citizens have already taken the notion of social media as a tool in crisis management and have started using it to spread and collect information, updates, and warnings (Saroj & Pal, 2020).

Not only does social media influence a crisis from an audience point of view, but it has also influenced the crisis management process. According to Alexander (2014), social media can be used in seven ways during crisis management. First, social media has a *listening function*. It provides a voice to those that normally do not have one. Also, through its tendency to coalesce opinions, social media can reveal some aspects of the mental and emotional state of a community. Secondly, social media can be used to *monitor a situation*. With mass participation, false rumors tend to circulate during crises. By monitoring this, experts can correct them. For example, floods in Queensland, Australia, led to extensive use of social media, but not to the massive sharing of false information. Even though rumors were present during the height of the crisis, moderators of the Facebook pages were quick to confirm the information and provided sources when available. Hence, even though there was a major crisis, the use of social media did not lead to a situation of unrest or general anarchy (Bird et al., 2012). Third, the *integration of social media into emergency planning and crisis management*. The direct person-to-person nature of social media can be very helpful to public information officers, as it helps to avoid being misquoted by official media. Furthermore, citizens often are the real first responders in a crisis, so informing them of the correct and needed information is very important. One example of how this could be done involves the sharing of local information in the form of maps, data, and instructions on how to act during a crisis. Fourth, *crowd-sourcing and collaborative development*. Social networks and the interaction between people increases productivity and lend added value to outcomes. Likewise, according to Schultz & Wehmeier (2010), social media has a growing role to act in the societal construction and deconstruction of crises through the creation of virtual communities. Due to its interactive character, social media is especially suitable for this and is a great way to create communities of like-minded people (Watkins, 2014). One aspect of this is the formation of social capital through social media by crowd-sourcing. Crisis mapping (e.g., the real-time gathering, display, and analysis of data during a crisis) is especially fitted to crowd-sourcing through the use of social networks since reports are directly received by many people at once. These maps can then depict people to for example shelters or give instructions on how to act. Fifth, *creating social cohesion and promoting therapeutic initiatives*. Taylor et al. (2012) noted that people caught up in crises felt more supported and optimistic about the future when social media was extensively involved. Besides, social media can enhance voluntarism by increasing the profile and connectedness of voluntary organizations. Sixth, *the furtherance of causes*. Social media can help to raise more donations for causes or organizations by launching an appeal. Seventh, *research*. Crises can trigger certain social reactions that can be studied. Social media can be used to enhance the

understanding of this. However, due to the limited scope of this research and the fact that its focus is on the public discourse, it was decided to leave this usage out.

After having elaborated on the positive uses of social media in crisis management, Figure 3 can be extended by including the positive uses of social media. This is displayed in Figure 4 below.

Figure 4: Social's media positive role in transboundary crisis management



Taking into account the ways described by Alexander (2014), the above-presented Figure was constructed. As can be seen, social media can contribute to all four stages of transboundary crisis management and can be used two-sided. That is, to collect information from the public and to give information to the public.

2.3.3. Social media and crisis management: public discourse created by the public

Even though social media has brought the advantages of fast and effective communication and can be helpful in many ways, it also has its negative sides. Firstly, rumors and the dissemination of false or misleading information can have serious consequences. Castillo et al. (2011) observed that “immediately after the 2010 earthquake in Chile when information from official sources was scarce, several rumors posted and re-posted on Twitter contributed to increasing the sense of chaos and insecurity in the local population”. Broadly, such a situation can be defined as an echo chamber. The

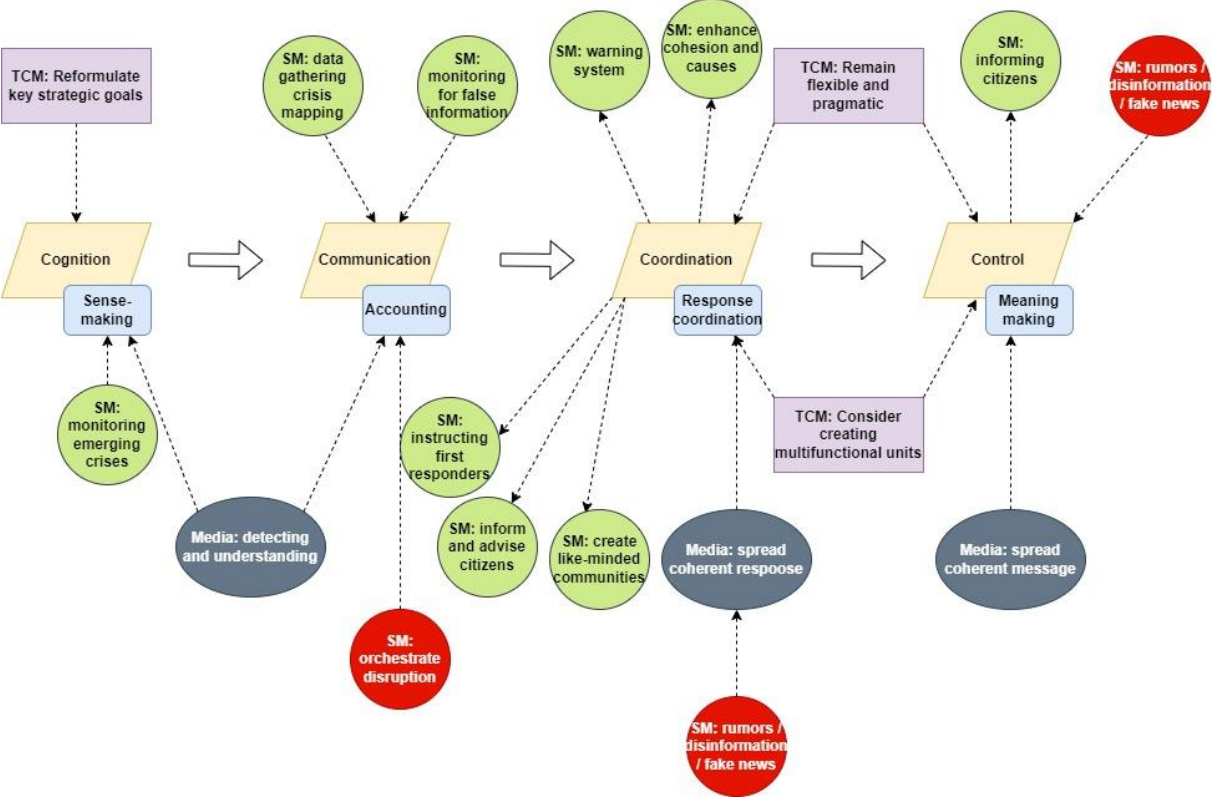
latter refers to a situation where the opinion, political leaning, or belief of people about a topic gets reinforced due to repeated interactions with peers/sources having similar tendencies, beliefs, and attitudes (Cinelli et al., 2021). A somewhat similar event to the earthquake in Chile happened in the aftermath of Hurricane Sandy in 2012. There, many social media users used photoshop to manipulate pictures of the storm. Moreover, false information about which places were flooded was widely spread. Eventually, certain false pieces of information were spread so much, that they were picked up by mainstream media and assumed to be true (Alexander, 2014).

Secondly, social media can have negative effects when it is used to orchestrate, for example, riots or disruption. Denis-Remis et al. (2013) explained this by referring to how patriotic Chinese used social media to orchestrate the disruption of a French hypermarket company in China in 2008, because of anger at French Government policies towards Tibet. Once it had started and gained traction, it was impossible to stop. This shows the positive feedback on the effects of messaging inherent in social media usage during crises. The latter has the potential to generate unstoppable, uncontrollable developments with little to no regard for whether its consequences are positive or negative (Alexander, 2014).

Thirdly, the ability of social media to spread fake news. For this study, especially the negative side of social media is important since social media is inherently involved in crisis management. Fake news can be defined as follows: “fake news refers to all kinds of false stories that are mainly published and distributed on the internet, to purposely mislead, befool or lure the reader for financial, political or other gains.” (Zhang & Ghorbani, 2020, pp. 4). So, not only financial motives might be a reason to create and spread fake news, but also political or other motives might be reasons to do so. Besides this, the technological advances of the last two decades (e.g., better access to the internet, the upcoming of social media, and the development of the smartphone) that have increased access to and popularity of social media facilitates a perfect breeding ground for fake news (Zhang & Ghorbani, 2020). This became quite clear during the 2016 US presidential elections and the Brexit referendum, where fake news on Twitter certainly played a role in influencing voters (DiFranzo & Gloria-Garcia, 2017; Bovet & Make, 2019; Grinberg et al., 2019). The advent of social media platforms such as Facebook and Twitter presented a new opportunity for targeting groups of people and provide an easy way to share information and connect with others (Burkhardt, 2017). Moreover, they offer multiple methods of indicating approval (e.g., icons, likes, and comments). This allows the user to post a message on their pages without actually writing something, and as such ideas or opinions can easily be shared, even though they might contain fake news. The latter can have serious consequences since it might influence people’s belief in authorities, experts, and the government (Zhang & Ghorbani, 2020). An example of this was seen during the Covid-19 pandemic, where all kinds of fake stories about causes and alleged cures were spread. These include the view that 5G technology caused the pandemic, that mosquitoes could transmit the virus and that neat alcohol could be used as a cure (Neaam, Bhatti & Khan, 2020). Thus, fake news can

have serious consequences when trusted and believed. Moreover, since fake news is most often spread via social media and the fact that social media is inherently involved in crisis management, fake news has effects on crisis management as well. Fake news on social media hinders all stages of crisis management. In the cognition phase, fake news blurs the boundaries between what is truly an emerging crisis and what is untrue. As such, it becomes much more difficult for crisis managers to detect an emerging crisis and recognize the degree of emerging risk. In the sense-making stage, fake news causes several problems. It hinders crisis managers from understanding a crisis correctly. That is, it heightens the importance of monitoring and correcting fake news, but also troubles data-gathering for crisis mapping in the sense that it might display a distorted version of reality. In the response coordination stage, fake news hinders a good response by giving wrongful information to first responders or for example giving false information on where help is needed.

Figure 5: Social media's negative role in transboundary crisis management



Taking into account the three negative roles social media can play in crisis management, Figure 5 above was constructed. As can be seen, social media can have (a negative) impact on the accounting, response coordination, and meaning-making stage.

2.3.4. Social media and crisis management: framing on social media

Key in using social media for both managing a crisis and discussing a crisis from an audience's perspective is framing. By framing a crisis in a certain way, social media can alter the parameters of crises (Ott & Theunissen, 2015). Moreover, due to the 24/7 accessibility to means of communication offered by social media such as Facebook and Twitter, the complexity of crises is raised by the participation of multiple actors that before the rise of social media were not necessarily involved. This poses challenges, but also opportunities for crisis managers regarding choosing the appropriate crisis communication strategy. Although there is no single definition of framing, most definitions share similar characteristics. Globally, framing refers to the selection of only some aspects of perceived reality, in such a way as to promote a particular belief, definition, view, or idea (Entman, 1993). Literature to date has identified a handful of frames that occur commonly on social media. This study focuses on five frames that have been discussed in literature before (Semetko & Valkenburg, 2000; Zhao, 2017). Specifically, these are the identification frame, the responsibility frame, the human-interest frame, the (economic) consequences frame, and the contested public opinion frame (Semetko & Valkenburg, 2000; Zhao, 2017).

Starting, with the identification frame on social media. This frame describes the event. Posts on social media matching this frame offer a definition or expand on it by listing related issues (Zhao, 2017). The identification frame on social media can impact crisis management in three stages. First, it can be used in the accounting stage by crisis managers in crisis mapping and monitoring for false information. That is, by monitoring the identification frame on social media, crisis managers can construct an overview of how a crisis is perceived and felt by the public and at the same time monitor for false information. Second, it can be used in the response coordination stage to spread warning messages, instruct first responders, inform, and advise citizens and create communities of like-minded people by spreading a coherent response message. Third, the identification frame can be used in the meaning-making stage to inform citizens by spreading a coherent narrative of the crisis.

Second, the responsibility frame presents an event in such a way as to attribute responsibility for its cause or/and solution to either the government, an individual, or a group (Semetko & Valkenburg, 2000). This frame can impact crisis management in the accounting stage in crisis mapping and the monitoring of false information. As such, crisis managers can construct an overview of who is deemed responsible for the crisis on social media and at the same time monitor for false information.

Third, the human-interest frame gives a human face or attaches emotion to the presentation of an event. This frame is often used to retain the audience's interest by personalizing, dramatizing, or emotionalizing a post (Semetko & Valkenburg, 2000). The human-interest frame can impact crisis management in two stages. It can be used in the accounting stage by crisis managers in crisis mapping

to construct an overview of the public's emotions and feelings during a crisis. At the same time, it can be used to monitor for false information. In the response coordination stage, it can be used to enhance social cohesion and promote good causes by spreading messages matching this frame that mention for example voluntarism. This can help to create a well-aligned response to the crisis.

Fourth, the (economic) consequences frame defines an event in terms of the consequences it will have or has on those involved (Semetko & Valkenburg, 2000). This frame can impact crisis management in the accounting stage through crisis managers using it in crisis mapping and monitoring for false information. That is, by monitoring the frame and determining what consequences are present (and what is fake) and deemed important by the public.

Fifth, the contested public opinion frame stresses contested viewpoints or positions among individuals and groups. It, for example, includes posts containing disagreements or posts that aim to argue against other viewpoints or include fake news (Zhao, 2017). This frame can impact crisis management in the accounting, response coordination, and meaning-making stages. In the accounting stage, it can be used in data gathering to construct what contesting opinions are present and how much. Besides, it can be used to check for false information in those contested opinions. Furthermore, this frame can be used by citizens not involved in crisis management to orchestrate disruption. This might harm the crisis management process and should therefore be taken into account in the crisis mapping. In the response coordination stage, this frame can have a negative impact. If this frame is present often and is spread regularly, it might get picked up by traditional media believing it to be true, leading to confusing response coordination. Last, in the meaning making stage it can have a similar impact if fake news is present in those opinions, leading to a less coherent narrative being seen by the public.

Figure 6: The role of framing on social media in transboundary crisis management

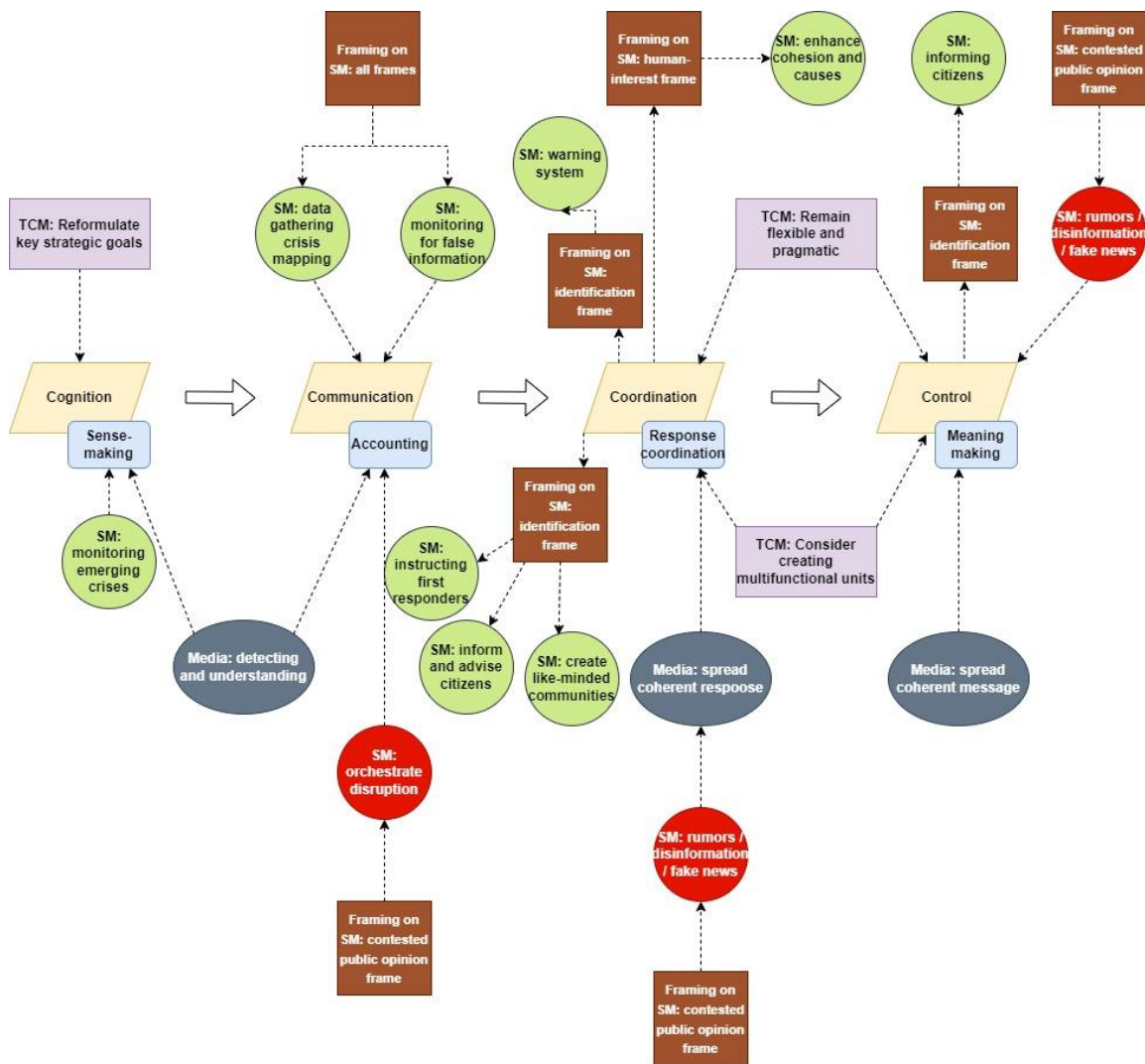


Figure 6 above shows how frames on social media can impact transboundary crisis management. As can be seen, frames on social media are involved in the accounting, response coordination and meaning-making stage. Moreover, they are used both ways. That is, to collect information from the public by monitoring frame and to provide specific information to the public by making use of a certain frame (i.e. the identification or human-interest frame).

3. Methodology

This thesis aims to explain to what extent the public discourse on social media during the Rhine flooding of July 2021 impacted TCM. Therefore, the chosen approach combines desk research, public discourse analysis, and semi-structured interviews with experts.

3.1. Research design

3.1.1. Desk-research

The aim of the desk research was twofold. On the one hand, it was used to build the theoretical framework. On the other hand, it was used to study the Rhine flooding of July 2021 as a case. That is, to identify how both the German and Dutch authorities managed the flooding. Regarding the building of the theoretical framework, academic articles were selected, systemized, and synthesized based on a set of keywords used to collect the articles. Databanks Scopus and Google Scholar were used for this. Table 1 below depicts the used keywords.

Table 1: Keywords used to collect academic articles

Keywords
- Crisis management
- Crisis
- Transboundary crisis
- Transboundary crisis management
- Fake news
- Fake news social media
- Fake news crisis
- Crisis communication
- Crisis framing
- Social media framing

To test the theoretical framework, a case study was performed. For this, the Rhine flooding of July 2021 across the Dutch-German was chosen. The reason for choosing this specific case is two-folded. Firstly, to test the impact of the public discourse on social media on TCM, there is a need for a case that affects more than one country and is widely discussed on social media. The Rhine flooding of July 2021 affected multiple countries, including the Netherlands and Germany, and is widely discussed on social media in both countries. Secondly, to test the impact of the public discourse on social media, there is a need for a case that implies TCM. Even though the Netherlands and Germany have their own regional and national plans regarding crisis management and the Rhine, they also work together transboundary across

the border. Examples include membership of both countries in the International Commission for the Protection of the Rhine (ICPR) and Euregio Meuse-Rhine Incident Control and Crisis Management (EMRIC). Besides, even though both countries have their own plans, they are still dependent on each other as the Rhine flows through both countries, and taking measures in one country might have consequences in the other (e.g., closing a water-lock, dike breaches, the opening of a dam). This makes the Rhine flooding of July 2021 a good fit for doing research into TCM.

By focusing on the Rhine flooding of July 2021 across the Dutch-German border, the researcher was also able to collect more specific information on the crisis management of the flooding. For this, articles from the media and official documents/reports on the flooding were collected based on a set of keywords. Table 2 below depicts the keywords used.

Table 2: Keywords used to collect media articles and official documents/reports

Keywords (Dutch)	Keywords (German)
- Rijn overstroming 2021	- Rhein Hochwasser Juli 2021
- Overstroming Juli 2021	- Krisenplan Deutschland
- Crisis plan overstroming	- Krisenplan Hochwasser
- Crisis plan hoogwater	- Hochwasser Juli 2021
- Crisis plan Nederland	- Hochwasser Nordrhein-Westfalen 2021
- Crisis management Rijn	- Hochwasser Rheinland-Pfalz 2021
- Evaluatie hoogwater 2021	- Auswertung Rhein Hochwasser 2021
- Crisis Rijn 2021	- Rhein Krise 2021

Searches were performed on Google and relevant websites such as the websites of Rijkswaterstaat, Safety Region South-Limburg, North-Rhine Westphalia (NRW), and the Rhineland Palatinate (RLP).

3.1.2. Social media analysis / public discourse analysis

The second method used in this study is public discourse analysis. To better understand the Rhine flooding the public discourse on social media, namely Twitter, was analyzed. Social media both reflect (i.e., the messages sent by people on the Rhine flooding) and influence the public discourse on crisis management (i.e., through communication by formal stakeholders involved in the Rhine flooding). The analysis existed of three parts: frequency, meta-communication, and frames. To identify the public discourse, this research makes use of frames. Frames can be described as conceptual tools that individuals rely on to convey, interpret, and evaluate information. Furthermore, frames also set the parameters in which the public discusses public events, such as crises (Semetko & Valkenburg, 2000). As such, frames illustrate the public discourse. Twitter was chosen as the platform to identify the frames

and to construct an overview of the public discourse of the Rhine flooding of July 2021, due to its broad use and unique characteristics. Both in the Netherlands and Germany, Twitter is among the most popular social media platforms.²³ Twitter allows its users to express their feelings and opinions and allows for easy conversations between users. Furthermore, Twitter’s specific features (e.g., retweets, likes, comments) enable easy identification of the popularity of a tweet by attaching a certain level of importance to it.

For the collecting of tweets, a set of 14 keywords was used. Half of them were in Dutch, and half of them were in German. Table 3 below depicts this set of keywords.

Table 3: Keywords used to collect tweets

Keywords used to collect Tweets	
Dutch (all in combination with “Rijn”)	German (all in combination with “Rhein”)
- Overstroming	- Flut
- Wateroverlast	- Überschwemmung
- Hoogwater	- Hochwasser
- Evacuatie	- Evakuierung
- Waarschuwen*	- Warnung
- Klimaat	- Klima
- Klimaatverandering	- Klimawandel
- Crisis	- Krise

All keywords were entered in the advanced search function of Twitter in combination with either “Rijn” or “Rhein” (i.e. the Dutch and German translations of Rhine). Moreover, a time span and selection criteria were chosen to only select relevant tweets. The starting point for the timespan, the 12th of July 2021, was chosen since this was the first day Western and Central Europe were confronted with severe and intense rainfall caused by low-pressure system “Bernd”. Besides, it was the first day a warning was provided via the Modular Warning System (MoWas) in Germany (Thieken et al., 2022). For the end date, the 26th of July 2021 was chosen, as even though the massive rainfall had stopped on the 19th, water levels remained high, infrastructure was damaged, people were still missing, and crisis management was still necessary.⁴ As such, attention for the Rhine on social media was still high. After first having scanned the tweets matching the time span and keywords, some additional selection criteria were established.

² <https://www.statista.com/statistics/880865/number-of-twitter-users-in-the-netherlands/>

³ <https://www.statista.com/statistics/1059426/social-media-usage-germany/>

⁴ <https://www.vrt.be/vrtnews/nl/2021/07/16/zestig-doden-en-tientallen-vermisten-na-overstromingen-in-duitsl/>

The selection criteria used in combination with the time span and keywords are depicted in Table 4 below. An explanation of the criteria is given below the Table.

Table 4: Selection criteria tweets

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> - Tweets matching one of the keywords - Tweet within the times span 12.07.2021 – 26.07-2021 	<ul style="list-style-type: none"> - Tweets consisting of less than five words - Tweets having less than five likes or retweets - Quote Tweets without added text - Tweets only consisting of #words - Tweets only consisting of link(s) - Tweets that still do not make sense when reading it more than twice - Tweets already included

Only tweets matching one of the keywords and time span were included. Regarding the exclusion of tweets, it was decided to exclude tweets with less than five words, since tweets shorter than that often proved to be unclear. Moreover, also tweets with less than five likes or retweets were excluded since that meant these tweets did not have a large reach and were thus of lesser importance. Quote tweets without added text are essentially a duplication of the original and as such would already be included in the dataset. Therefore, it was decided to exclude these as well. Tweets only consisting of #words often were hard to understand and tweets only consisting of links did not give information in the tweet itself. So, these were excluded as well. The last two exclusion criteria speak for themselves. Eventually, a total of 245 tweets were collected based on the keywords, time span, and selection criteria. All tweets were coded based on the frames: the identification frame, the responsibility frame, the human-interest frame, the (economic) consequences frame, and the contested public opinion frame. This was done by comparing the tweets to the definitions of the frames and giving them a code ranging from 1 through 6. All frames, definitions, codes, and examples from the data collected can be found in the codebook (see Table 13 in Appendix 7.1). After the coding, each frame was analyzed to assess its impact on the stages of the transboundary crisis management process. This was done by looking at the frequency as well as popularity of a frame. The popularity of a frame was determined based on the average number of comments, likes, and retweets. Based on the assessment criteria in Table 5 below, points were awarded to each frame. Most weight (50%) was attached to the number of tweets since that mostly determines how many people see a tweet, followed by the average number of retweets (30%) as this increases the reach of a tweet. The least weight (10%) was attached to both the average number of comments and likes as these do not increase the reach of a tweet, but are just expressions of the user reading the tweet.

Table 5: Assessment criteria number of tweets, retweets, comments, and likes

	Points awarded				
	1	2	3	4	5
Number of tweets (50%)	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100
Average number of retweets (30%)	0 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	10 - 12.5
Average number of comments (10%)	0 - 0.75	0.75 - 1.5	1.5 - 2.25	2.25 - 3	3 - 3.75
Average number of likes (10%)	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50

Ultimately, the impact of a frame was determined by adding up the points and calculating a weighted average score. The formula related to this is displayed below.

$$\text{Impact frame} = (\text{no. of tweets} \times 0.5) + (\text{average no. of retweets} \times 0.3) + (\text{average no. of comments} \times 0.1) + (\text{average no. of likes} \times 0.1)$$

Ultimately, the calculated weighted average score corresponds to a certain extent of impact. Table 6 below shows what impact score related to what extent of impact.

Table 6: Extent of impact related to weighted score frame

	Extent of impact				
	Very small	Small	Moderate	Large	Very large
Weighted average score frame	0 - 1.2	1.2 - 2.4	2.4 - 3.6	3.6 - 4.8	4.8 >

As can be seen in the Table above, the extent of the impact of each frame ranges from very low to very high, depending on the weighted average score of the frame.

3.1.3. Semi-structured interviews

To analyze to what extent the discourse on social media impacted TCM during the Rhine flooding of July 2021, it is necessary to understand how the crisis management process worked and if and how the discourse on social media was experienced by crisis managers (e.g., what they believed to be the public's sentiment). Based on the selection criteria displayed in Table 7 below, potential interviewees were contacted either directly or through the organization they work(ed) for.

Table 7: Selection criteria expert interviews

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> - Members/employees of a Dutch or German national, regional or local authority with crisis management authority in the Rhine flooding of 2021 - Members/employees of a Dutch or German national or regional authority with crisis management authority in a similar flood (e.g., Meuse) 	<ul style="list-style-type: none"> - Interviewees who are not fluent in either English or Dutch - Interviewees with no experience in the Rhine flooding of July 2021

Twelve different organizations and over 20 experts were approached (e.g., waterboard Rivierenland, city region Aachen, the city of Koblenz, Safety Region South-Limburg, the Wupper Union, Rijkswaterstaat). Eventually, three Dutch experts agreed to participate in an interview and one German expert agreed to answer some questions via email and referred to a previously given interview. All of them had functions related to either communication or crisis/risk management: senior communications advisor, advisor crisis management, specialist risk and crisis communication, and head of water resource and flood risk management. To not limit the interviewees in their answers, the interviews were semi-structured. This allowed room for follow-up questions, which proved beneficial. The interviews were held online individually with each expert in the Dutch language and lasted between 45 and 60 minutes. Interview questions were divided into three separate blocks: (1) the expertise of the interviewee, (2) questions regarding TCM, and (3) questions about the use of social media in crisis management (see Table 14 in Appendix 7.1). To fasten the transcription process, Microsoft Office 365 was used.

4. Results

This chapter provides an overview and analysis of the collected data starting with an overview of the crisis management regarding the flooding. Then the descriptive analysis of the collected tweets is presented followed by the overview of the results from the interviews.

4.1. Crisis management of the Rhine flooding of July 2021

The Netherlands and Germany work together on many topics, including the Rhine. Think for example of both countries being a member of the ICPR. However, they also have their own regional and national plans for addressing crises such as floods. Whilst the Netherlands has standardized procedures defined on a national level that are executed by the Water Boards on a regional and local level, Germany has decentral procedures that are defined and executed on a regional and local level. This paragraph elaborates on how both countries managed the crisis of the Rhine flooding of July 2021.

4.1.1. Crisis management of the Rhine flooding of July 2021: the Netherlands

The Netherlands has Water Boards to manage the water (e.g., rivers, lakes, and sea). Water boards manage the supply and drainage of water, the treatment of sewage, the discharge of polluted water, and the maintenance of flood defences such as dikes and dunes. Regarding the Rhine river, Water Board Rivierenland is the most important authority, as they are responsible for the safety of the dikes.

Specifically created for high water, the Netherlands has a national roadmap that has to be used by Water Boards such as Rivierenland. This roadmap makes use of a color-coding scheme related to water levels for the upscaling of crisis management during high water and floods. As such, the water levels on the rivers in the Netherlands refer to a color code corresponding to certain actions that need to be taken. For the Rhine river, the color-coding scheme presented in Table 8 below has been developed.

Table 8: Scaling criteria high water Rhine/Waal/Meuse

Coördinatiefase (en bijbehorende kleurcodering)	Waterstanden	
	Rijn/Waal (Lobith)	Maas (Sambeek Beneden)
0 (geen dreiging)	n.v.t.	n.v.t.
1 (lichte dreiging)	NAP+13,00m	NAP+11,70m
2 (dreiging)	NAP+15,00m	NAP+12,65m
3 (ernstige dreiging)	NAP+16,50m	NAP+13,40m
4 (zeer ernstige dreiging)	NAP+18,00m	NAP+14,40m

This color-coding scheme indicates when and what actions need to be taken by Water Board Rivierenland regarding the Rhine river. These actions are related to the water level in the Rhine and the five so-called coordination stages related to crisis management. These stages (0 through 4), in which

coordination stage 0 means there is no threat and stage 4 means a critical threat, are visualized with traffic light colors. Based on the water level of the Rhine, the coordination stage and color code are determined. The color code and coordination stage are indicated 24 hours before the threshold level of that coordination stage is expected. For measuring water levels, the Dutch water boards use Nieuw Amsterdam Peil (NAP). NAP is the standard way to measure heights in the Netherlands with its zero point being equal to the average sea level of the North Sea (Rijkswaterstaat, 2022).

When comparing Table 8 with the water levels of the Rhine during the high water in July 2021, it becomes clear that only the green and yellow color codes (and thus coordination stages 0 and 1) were used as the water level did not reach above NAP +15.00m. Instead, the highest expected water level remained at NAP +14.15m whilst the actual highest water level did not reach above NAP +14.07m. Table 9 below depicts the water level of the Rhine during this period. As Rijkswaterstaat only publishes water levels of the Rhine in cases of elevated or expected elevated water levels, only the dates 15.07.2021 until 23.07.2021 are included. This confirms that water levels on the Rhine in the Netherlands did not elevate, or at least did not elevate significantly, before the 15th of July.

Table 9: Water level Rhine at Lobith

Date	Expected water level (in meters)	Actual water level (in meters)
15.07.2021	*	NAP+11.80m
16.07.2021	NAP+12.90m	NAP+13.01m
17.07.2021	NAP+14.20m	NAP+13.83m
18.07.2021	NAP+14.15m	NAP+14.07m
19.07.2021	NAP+14.05m	NAP+13.86m
20.07.2021	NAP+13.60m	NAP+13.45m
21.07.2021	NAP+12.75m	NAP+13.05m
22.07.2021	NAP+12,75m	*
23.07.2021	NAP+12,35m	NAP+12.23m

*No information was published **Based on expectations set at 21.07.2021

The yellow stage indicates that standard measures need to be taken by water managers. These include both administrative and practical measures. The former refers to the distribution of flood/storm surge warnings by the Water Management Centre of the Netherlands (WMCN) to the waterboards and Rijkswaterstaat, internal discussion about the actual situation, and the establishment of the Actie Centrum Water (ACW). When established, the ACW is responsible for collecting water levels, identifying potential bottlenecks, providing damage reports, and coordinating the dike managers and

dike guards. Dike managers need to perform inspections of the dikes twice a day, inform contractors to start preventive measures when necessary, supervise hired personnel working on behalf of the water board, ensure that the outer polders inundate by established policies, and record water levels twice a day. Regarding practical measures, these can include restrictions on user functions on or near the river (e.g., shipping, and activities in the floodplains) or adjustments to the water level in the watercourses inside the dikes if necessary (Waterschap Rivierenland, 2021).

During the situation of July 2021, the actual measures remained limited. The biggest measures taken were related to dike monitoring. Smaller measures were related to warnings on activities near and on the Rhine (e.g., being careful with swimming, camping, etc.), and to the creation of a special telephone number for questions related to high water (Waterschap Rivierenland, 2021). To put these measures in perspective, in coordination stage 4, a dike breach is to be expected and national safety might be at risk. Subsequently, measures include all measures of previous coordination stages, 24/7 occupation of the levee stations, the aligning of an evacuation grid, and at least six inspections per day of the damming structures.

Concluding, since the water levels in the Rhine did not reach the thresholds of the red or even the orange color codes, crisis management remained basic but was still initiated and evaluated by the water board afterward. Eventually, dike monitoring and warnings for elevated water levels proved to be enough. Moreover, to increase efficiency and keep volunteers motivated, waterboard Rivierenland even decided to change the decision-making process regarding dike inspections to a more automated one based on what the system reports, which is depicted by the quote from a civil servant below.

EXCERPT FROM AN INTERVIEW

“In July, we chose to perform dike inspections twice a day, which was on the safe side. Whereas now we said, okay we understand we wanted to follow this plan, but we have also seen that it is not good for the motivation of the people who have to walk there and it was also just not necessary for safety. So, we have now completely attributed it to depending on what the system reports. So, we’re going to deploy levee monitoring on the stretches where it’s needed.”

4.1.2. Crisis management of the Rhine flooding of July 2021: Germany

In Germany, it is the official duty of public authorities to carry out recognizable, feasible, and economically reasonable flood protection measures. These are enshrined in law in BGHZ 54, 165 (Pohlmann, 2015). The respective federal states are responsible in this regard, and the organization of flood protection is most often carried out by the respective cities and municipalities. Concrete measures,

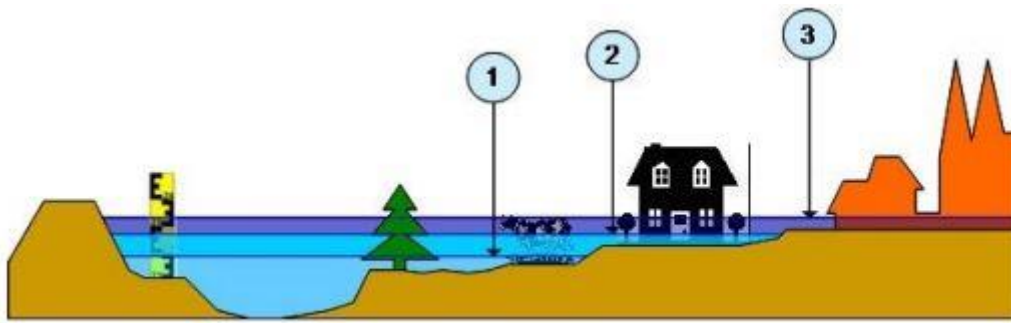
however, must be determined for each case individually. For economic reasons, complete flood prevention and protection is impossible, which is why the selection of measures is based on a consideration of the extent of the flood, the expected damage, the probability of a flood happening, and other ecological and economic factors. Overall, flood protection measures in Germany can be divided into four areas: spatial planning, structural measures, organization measures, and risk prevention. Spatial planning primarily includes keeping potential floodplains from development and sealing. This does not prevent flooding but also does not cause major damage. Structural flood protection serves to retain or attenuate the flood wave. Measures for this includes dams, dikes, and the expansion of watercourses. Organizational measures include measures that serve to improve flood risk management. Examples of this are rescue plans and the installation of warning equipment (Ehret & Bárdossy, 2002). Regarding the Rhine flooding of July 2021, mostly North Rhine-Westphalia (NRW) and Rhineland-Palatinate (RLP) were affected. As such, the focus will be on those states.

North Rhine-Westphalia

The state of NRW does not have a specific crisis management plan regarding high water or flooding of the Rhine. Rather, it dictates authority to the district governments based on five principles that are established in the Law on the New Regulation of Fire Protection, Relief, and Civil Protection (Ministerium des Innern des Landes Nordrhein-Westfalen, 2015). These principles state that the district governments are responsible for the coordination of defense measures, crisis and operational management, communication with the municipalities, training and educating personnel, and the coordination of emergency response measures by municipalities in their district. Based on these principles, the individual district governments determine what flood protection measures need to be taken at what point in time during flooding or expected flooding. Often, these measures are related to water levels and a hydrological report from the Landesamt für Natur, Umwelt und Verbraucherschutz Nordrhein-Westfalen (LANUV). This report is based on information from the Deutsche Wetter Dienst (DWD) and the water levels of the flood gauges in NRW (99 in total). These flood gauges all have three information values attached to them, which differ per location. However, in general, they correspond to the below-mentioned definitions. These are also visualized in Figure 7.

1. Information value 1: start of the watercourse overflows (agricultural, forestry land, and traffic areas might be flooded).
2. Information value 2: there is a risk of flooding of built-up areas or infrastructure.
3. Information value 3: risk of flooding of built-up areas or larger infrastructure facilities

Figure 7: Information values flood gauges NRW



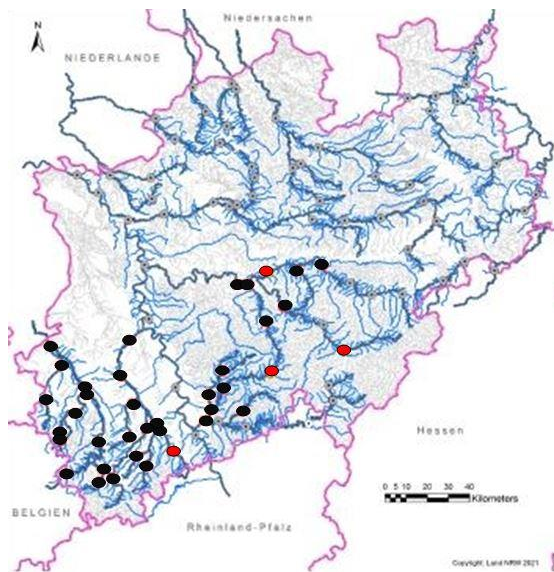
In case of elevated water levels, the LANUV sends a report to the affected district governments. Based on that, the district governments determine what measures to take. During the Rhine flooding of July 2021, the affected district governments were Arnsberg, Cologne, and the Wupper Union. Even though measures differ per district government, they are all responsible for warning relevant authorities within their districts (e.g., municipalities, control centers for fire protection, relief, crisis protection, and rescue services). To illustrate, an example of how water management was performed in Cologne during the flooding of July 2021 is presented.

To determine what measures to take, Cologne looks at the report from the LANUV and the (expected) water level of the Rhine in Cologne. Information value 1 is reached when the Rhine reaches a level of 5.50 meter KP (Cologne Level). Measures taken at that point include the flooding of parking lots and the getting into the action of five flood pumping stations. Information value 2 is reached when a level of 7.00 meter KP is reached, followed by information value 3 when a level of 10.70 meters KP is reached. Regarding the former, measures include the activation of a large valve program in the sewerage network, the placement of water barriers, and the activation of more flood pumping stations.

During the Rhine flooding of July 2021, the highest water level reached on the Rhine in Cologne was 8.06 meters, which was reached on 17.07.2021. Measures corresponding to a water level that high (and executed back then) are the placement of mobile walls in the Rodenkirch Auenviertel, the activation of a total of 22 sewage pumping stations, and the expansion of the large valve program in the sewage network. These measures are an extension of measures taken at lower water levels.

Fortunately, consequences remained limited in Cologne. However, this was not the same for all of NRW. During the Rhine flooding of July 2021, 44 times a flood gauge surpassed its information value 2 and/or 3 at least once, indicating high water levels and potentially dangerous situations. Figure 8 below, depicts which flood gauges surpassed information values 2 and/or 3. The red dots indicate which flood gauges surpassed information value 2, and the black dots which flood gauges surpassed information value 3.

Figure 8: Flood gauges in NRW that surpassed information values 2 and/or 3



Besides, due to the severity of the water discharge, several flood gauges were destroyed, which made data recording and transmission no longer possible in these cases. It is important to note that all these gauges were only destroyed after information value 3 was surpassed, and thus after the highest level. Realizing that infrastructure might already be flooded when information value 2 is exceeded and that several flood gauges surpassed information value 3 or were even destroyed, shows the severity of the flooding in NRW.

Even though the consequences were severe, the LANUV and the flood warning services of the district governments of Arnsberg, Cologne, and the Wupper Union fulfilled their tasks. Already on 13.07.2012 at 2.52, the LANUV informed the district governments of heavy rain and continuous precipitation. Besides, the report also mentioned rapidly rising water levels in catchment areas. Accordingly, the flood warning services of the district governments of Arnsberg, Cologne, and the Wupper Union issued warnings to relevant addressees. However, on 19.07.2021 it became clear that the European Flood Warning System (EFAS) had already noticed signs of possible flooding nine days before the crisis. Furthermore, it warned the German authorities 24 hours in advance of the flooding and provided very accurate predictions of the flooding. The latter included areas close to the Ahr river, an area where 93 people later died due to the flooding.⁵

Rhineland-Palatinate

As in NRW, RLP has a legal framework for the execution of crisis management. This is laid out in the State Law on Fire Protection, General Assistance, and Disaster Control (Landesrecht Rheinland-Pfalz,

⁵ <https://www.tagesspiegel.de/politik/deutschland-wurde-prazise-gewarnt--die-burger-aber-nicht-5115079.html>

2020). Again, the municipalities and district governments are responsible for crisis management. This law specifies who is responsible for what and which alarm- and action plans need to be developed by the district governments. One of these is the alarm- and action plan for flooding. To help the municipalities and district governments with this, the Ministry of the Interior and Sports has developed a framework plan for flood alarms and response (2019). Crucial in this framework plan is the flood notification service of RLP. The latter calculates and provides reports and warnings on (expected) water levels on the rivers and creeks in RLP. For this, it uses a color-coding scheme ranging from green to purple. The color codes are related to the probability of a flood happening. Table 10 below depicts this color coding scheme including definitions and the probabilities of a certain flood to happen.

Table 10: Color codes used by RLP notification service

Color code	Definition	The statistical probability of happening
Green	Low flood risk, according to model calculations, there is at most a low flood risk	< HQ2 (once every two years)
Yellow	According to model calculations, flooding can occur up to an annual frequency of 10 (HQ10). There might be small protrusions in some places and isolated flooding of agricultural and forest areas	HQ10 (once every ten years)
Orange	Average flood risk, according to model calculations flooding can occur up to an annual frequency of 20 (HQ20). Flooding of individually developed plots or basements, minor traffic disruption on main and municipal roads.	HQ20 (once every 20 years)
Red	High flood risk, according to model calculations flooding can occur up to an annual frequency of 50 (HQ50). Flooding of developed lots or basements, blocking of regional traffic connections, incidental use of dam or weir required	HQ50 (once every 50 years)
Purple	Very high flood risk, according to model calculations floods may occur with an annual frequency of more than 50 (HQ50). Large-scale flooding of built-up areas, use of water or weir on a larger scale desired.	> HQ50 (less than once every 50 years)

During the Rhine flooding of July 2021, RLP and particularly the Ahr region were hit hard by flooding. A combination of already high soil moisture, melting snow, and intense rainfall led to floods on the Rhine, Moselle, and Ahr. Regarding the Rhine and Moselle, consequences remained limited, and only color codes green and yellow were used as model calculations and showed expected water levels that statistically occur somewhere between every 2 to 10 years. Regarding the Ahr however, the consequences were catastrophic. In the late morning of July 14, the water in the Ahr reached such a level that it was decided to set the warning to color code red, indicating a high risk of flooding. From 5:17 p.m. that day, the shift was made to the purple color code, indicating a very high flood hazard. All flood gauges in the Ahr area reached extreme levels, partly influenced by bridge culverts being blocked by debris, which caused water levels to rise. The devastating effect of the water eventually led to the deaths of 135 people, 17.000 people losing belongings, more than 9.000 buildings being destroyed or severely damaged along the Ahr, and many roads, utility lines, bridges, and communication means being cut off. (Landesamt für Umwelt Rheinland-Pfalz, 2022).

4.1.3. Transboundary crisis management during the Rhine flooding of 2021

Even though the Netherlands and Germany have their own national and regional crisis management and flood plans, they also worked together regarding the Rhine and management.

First, both are members of the International Committee for the Protection of the Rhine (ICPR). This committee was established to ensure the sustainable development of the Rhine and its floodplains and to reach a healthy situation in all waters of the Rhine's catchment area. Regarding high water, a good start to international cooperation was taken in February 1995 by starting the so-called "Action Plan High Water" which was - even though not completely - implemented in 2020. Large parts of this plan focused on lowering the water levels of the Rhine during high water, increasing awareness before and during high water by the development of flood maps, and the improvement of high water warning systems through international cooperation. The first of these was not completely fulfilled by 2020, but a considerable step in the right direction was taken. The latter two were fulfilled. With the creation of the web-based "Rhine Atlas" with flood hazard and flood risk maps for the Rhine, the populations of the ICPR countries can be informed of flood risks on the Rhine. Moreover, all high water warning systems along the Rhine work together closely and communicate information (ICPR, 2020). Even though these measures might not be directly related to the Rhine flooding of July 2021, they can be identified as TCM measures regarding the Rhine. By ensuring that water levels are lower during high water before there even is high water, the ICPR countries display cognition as defined in the theoretical framework. As such, they recognize higher water levels as a risk and thus perform crisis management. Besides, by sharing information about water levels regularly and by creating and sharing flood hazard and flood risk maps, the ICPR countries create a shared meaning and a coordinated response to water levels on the Rhine, which can be used during actual crises such as the Rhine flooding of July 2021. Below included

an excerpt by a civil servant from waterboard Rivierenland that highlights the sharing of information between the Germans and the Dutch regularly.

EXCERPT FROM AN INTERVIEW

“Yes, we just happened to get the German plan in the mailbox. [...] including the German partners. And we also started practicing with the German partners last January. Yes, those plans are coordinated, but even there it's sometimes a little difficult with the coordination and who to talk to.”

Second, both the Netherlands and Germany (and Belgium) are a member of EMRIC, which is a unique cooperation of public services responsible for public safety, including fire departments, technical assistance, and emergency medical assistance in their respective territories. EMRIC ensures that transboundary cooperation is possible, even though there are large differences in the operational and judicial systems of the members. Exemplary of EMRIC is the fact that around 900 ambulances and 300 firetrucks can quickly cross borders to quickly and adequately offer assistance (Euregio Meuse-Rhine, 2022). However, EMRIC does not have a specific, TCM plan, but rather focuses on the operational part of the incident and crisis management, which was also reflected during the Rhine flooding of July 2021. This was also highlighted by a civil servant from the safety region South-Limburg in the excerpts below.

EXCERPT FROM AN INTERVIEW

“In South Limburg, we have an agency EMRIC. EMRIC actually is the Euregio Meuse Rhine Incident Control and Crisis Management, It also focuses on cooperation regarding incident control in the EU. [...] and there are agreements that have simply been made for example that the German fire department will come to help and whoever is first there will start the incident response”

EXCERPT FROM AN INTERVIEW

“Yes, we help each other and that was very difficult during last year's high water, of course, because the Belgians had even bigger problems than us, if possible, so it was difficult to help them. We kept each other informed. They did. So there was a problem with a water lock in Belgium, for example, which may or may not have been opened, and there was some minimal contact about what exactly was going on, but these are all operational matters, so to speak. That is not written down anywhere.”

Concluding, EMRIC does apply TCM, but only in the form of operational actions such as disaster or incident control (e.g., sending ambulances, and firemen) and in communication. As such, TCM actions are performed in the response coordination stage as described in the theoretical framework.

Third, TCM is present between the Dutch waterboards and the German authorities. During interviews with civil servants from water board Rivierenland, it became clear that there is a cooperation between the Dutch waterboards and the German authorities in both normal times and times of crisis.

EXCERPT FROM AN INTERVIEW

“We do have conversations with each other about how we do that, what we mainly have is one person for the network. Who also speaks German. He goes to Germany once it is needed, and in the last exercise we also practiced that a German network partner comes to us. That is during the hot phase.”

EXCERPT FROM AN INTERVIEW

“Yes, we just happened to get the German plan in the mailbox. [...] including the German partners. And we also started practicing with the German partners last January. Yes, those plans are coordinated, but even there it's sometimes a little difficult with the coordination and who to talk to. And that's all nicely written down, but in practice, the question is sometimes whether it comes true? Last time we saw quite a bit, also in July, that there was quite a bit of contact. [...] also goes to Germany and has the contacts also in the cold phase with the Germans partners.”

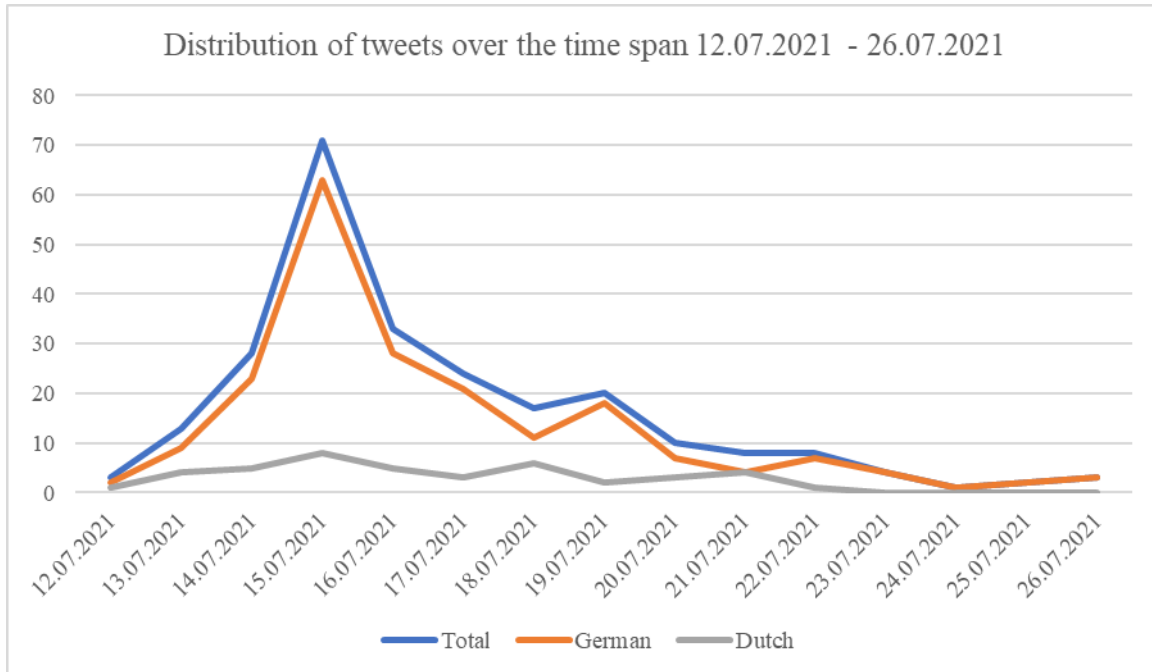
As can be derived from the excerpts above, during normal times – or the so-called “cold phase” – TCM is present with the sharing of crisis management plans, the performing of coordinated exercises, and the communication with the German partners via one designated person as some sort of liaison. During times of crisis, such as in July 2021, TCM is also present by communicating with each other. As such, this contributes to creating a shared understanding and maybe even a coherent response to the crisis as described in the theoretical framework and model.

4.2. The public discourse on social media and TCM

In this paragraph, an analysis is provided of the public discourse on social media during the Rhine flooding of July 2021. Between the 12th and 19th of July 2021, Western Europe faced heavy rainfall caused by the low-pressure system “Bernd”. Due to that, the water level of the Rhine increased and flooded in Germany. Consequently, attention to the Rhine on social media went up and people and authorities started to post messages about what was happening. In contrast to Germany, the Rhine did not flood in the Netherlands. As such, attention to the Rhine on Twitter was lesser, providing only 42

(17.14 percent) Dutch tweets. The remaining 203 (82.26 percent) tweets are in German. The distribution of all tweets is depicted below in Figure 9.

Figure 9: Distribution of the tweets over the time span 12.07.2021 - 26.07.2021



As can be seen in the Figure, the amount of Dutch tweets remains fairly stable over time except for three small peaks. The first small peak was on 15.07.2021, which was when water levels started to elevate in the Netherlands (Watermanagement Centrum Nederland, 2021). The second small peak was on 18.07.2021, which was when the highest water level in the Netherlands was reached (Watermanagement Centrum Nederland, 2021). The last peak was on 21.07.2021. On that day, water levels dropped back to normal levels, which was announced by relevant authorities on Twitter (Watermanagement Centrum Nederland, 2021).

Regarding the German tweets, there is one major peak and two smaller peaks. The major peak was on 15.07.2021. Rapidly rising water levels in the night from 14 to 15 July led rivers to flood, causing people to report the flooding on Twitter (Ministerium für Umwelt, Landwirtschaft, Natur- und Verbraucherschutz des Landes Nordrhein-Westfalen, 2021). A second, smaller, peak can be seen on 19.07.2021. On this day, it became publicly known that the first signs of flooding were already detected by satellites nine days before the crisis.⁶ This caused citizens to express their dissatisfaction about how the flooding was managed by authorities on Twitter. Another small peak was on 22.07.2021. Looking at the collected data, no clear reason is found for why this peak is present.

⁶ <https://www.tagesspiegel.de/politik/deutschland-wurde-prazise-gewarnt--die-burger-aber-nicht-5115079.html>

4.2.1. The public's discourse impact on TCM

The upcoming sub-paragraphs highlight the content of the public discourse on the Rhine flooding through an overview of the different frames that were used in the tweets in both Germany and the Netherlands.

Table 11: Frequency of frames over time span 12.07.2021 - 26.07.2021

Date	Identification frame		Responsibility frame		Human-interest frame		(Economic) consequences frame		Contested public opinion frame		No frame		Totals
	DU*	GER*	DU	GER	DU	GER	DU	GER	DU	GER	DU	GER	
12.07.2021	-	2	-	-	-	-	1	-	-	-	-	-	3
13.07.2021	4	8	-	-	-	-	-	-	-	1	-	-	13
14.07.2021	4	6	-	1	1	8	-	3	-	4	-	1	28
15.07.2021	4	16	-	7	4	28	-	2	-	8	-	2	71
16.07.2021	2	4	-	5	2	12	-	-	1	4	-	3	33
17.07.2021	1	9	-	1	1	9	1	1	-	1	-	-	24
18.07.2021	3	5	-	1	2	4	-	-	-	1	1	-	17
19.07.2021	2	4	-	5	-	7	-	1	-	1	-	-	20
20.07.2021	3	1	-	-	-	4	-	-	-	2	-	-	10
21.07.2021	1	-	-	-	1	3	1	-	-	1	1	-	8
22.07.2021	1	-	-	-	-	3	-	2	-	-	-	2	8
23.07.2021	-	-	-	-	-	3	-	1	-	-	-	-	4
24.07.2021	-	-	-	-	-	-	-	1	-	-	-	-	1
25.07.2021	-	-	-	-	-	-	-	2	-	-	-	-	2
26.07.2021	-	1	-	1	-	-	-	1	-	-	-	-	3
Totals	25	56	-	21	11	81	3	14	1	23	2	8	245

As can be seen in Table 11 above, the identification frame is the most used frame for Dutch tweets, whilst the human-interest frame is the most-used frame for German tweets. Overall, the latter is also the most used frame. Table 12 below highlights the average popularity of each frame, showing the number of tweets, the average number of comments, retweets, and likes.

Table 12: Overview average no. of tweets, comments, retweets, and likes per frame

Frames	Number of tweets	Percentage of total tweets	Average no. of comments	Average no. of retweets	Average no. of likes
Identification frame	81	33.06	1.21	6.86	19.72
Responsibility frame	21	8.57	2.29	4.48	33.24
Human-interest frame	92	37.55	1.86	6.30	32.36
(Economic) consequences frame	17	6.94	1.35	3.82	14
Contested public opinion frame	24	9.76	3.63	16.79	163.67

No frame	10	4.08	-	-	-
Overall average	46.60	16.66	1.92	6.43	26.23

As can be seen in the table, the contested public opinion frame scores the highest average of all frames for comments, retweets, and likes. However, this can be partly explained by one outlier (see tweet below) that was commented on 17 times, retweeted 147 times liked 3083 times, and was sent by a satirical German account.

TWEET

“The Rhine comes from a lab in Switzerland! #Flood”

If that tweet is taken out, the averages in the contested public opinion frame decline to 3.04 comments per tweet, 11.13 retweets per tweet, and 36.74 likes per tweet. However, even without the outlier, the contested public opinion frame scores the highest in averages.

4.2.2.1. The human-interest frame on social media during the Rhine flooding of July 2021

The human-interest frame was the most used. It was used 92 times (37.55 percent). On average, tweets matching this frame were commented on 1.86 times, retweeted 6.30 times, and liked 32.36 times. When comparing this with the assessment criteria in Table 5 on page 25 and calculating the weighted average score, it can be concluded that the human-interest frame scores an overall of 4.1 points, which indicates a large extent of impact. Four of all tweets matching this frame were sent by authorities having competencies in TCM of the Rhine flooding of July 2021. The remaining 88 were sent by those having no authority in the crisis management of the Rhine flooding of July 2021 (e.g., citizens, news stations, companies, etc.).

Over the time span, two peaks in the use of this frame were seen. The first and highest peak was on 15.07.2021. This is explained by the fact that the water level of the Rhine and its tributaries rose rapidly that night and day, causing people to express their emotions and experiences on Twitter. The content of the tweets concerns mostly emotional posts, e.g., sharing stories about extremely high water levels, prayers, or posts from people expressing how lucky they were not to lose everything overnight. The tweet below gives an example of such a tweet.

TWEET

“A colleague lost everything overnight. Fortunately, it is quiet here on the Rhine. I am grateful and deeply shocked. My problems seem very small grade. #Flood”

The second, much smaller peak, was on 19.07.2021. Tweets posted on that day discuss varying topics, but differ from the tweets posted during the first peak. The most common topics during the second peak are tweets about clean-up activities or tweets describing what the Rhine and surroundings look like after the flooding. Below an example tweet is included.

TWEET

“Water continues to recede, paths were briefly transformed into duck highways. According to a jogger, the Rhine still looked like the Amazon here on Thursday. #Düsseldorf #Flood”

As can be read above, this tweet mentions how the water starts to recede in Düsseldorf and notes that it looked like the Amazon before.

4.2.1.2. The identification frame on social media during the Rhine flooding of July 2021

The identification frame was the second-most used frame. It was found 81 times (33.06 percent). On average, the tweets matching this frame were commented on 1.21 times, retweeted 6.86 times, and liked 19.72 times. When comparing this with the assessment criteria in Table 5 on page 25 and calculating the weighted average score, it can be concluded that the identification frame scores an overall of 3.8 points, which indicates a large extent of impact. Out of all 88 tweets, 11 were sent by authorities having competencies in the crisis management of the Rhine flooding of July 2021. The remaining 70 were sent by those having no authority in the crisis management of the Rhine flooding of July 2021.

Three peaks were seen in the use of this frame. The first was on 13.07.2021. This can be explained by the fact that water levels on the Rhine started to visibly rise in Germany. As such, attention for the Rhine on Twitter went up. Content-wise, most tweets concerned either updates about water levels, expected weather, or warnings about that. Below an example tweet is included.

TWEET

“A new assessment of the development of water levels in the catchment area #Rhine #Moselle #Saar #Sauer #Ruhr is online: <http://pegeldeutschland.de>

@City_Trier@PoliceTrier @PoliceTrier @VGSchweich112 @Volksfreund @szaktuell @SAARTEXT #flood #continuous rain #heavy rain #storm #fire brigade #THW”

The second and highest peak in the use of this frame was on 15.07.2021. This can be explained by the rising water levels of the Rhine and its tributaries that day and night. As such, the situation changed a lot, which led to more updates about the current situation and thus more tweets matching the identification frame. Tweets on this day matching the identification frame in turn mostly concerned updates on the water levels and measures taken.

TWEET

“Before the departure to the #Hochwasser in NRW, the head of operations of the #Wassererschuttpolizei explained a few backgrounds to this support operation.

In the meantime, the task forces are on their way, according to the current status in the Rhine-Erft district.”

The last, smaller, peak was on 17.07.2021. The rise in attention for the Rhine on Twitter can be explained by a new storm causing problems. However, this was not the case everywhere, as water levels were sinking in some places as well. As such, tweets matching this frame concerned both topics. Below two examples are presented which reflect the latter. Below an example tweet is included.

TWEET

“Once again, thunderstorms in the southwest have necessitated numerous deployments. This time, South Baden was particularly affected. Meanwhile, the #flooding on the Rhine continues to swell - more storms are possible.”

TWEET

“The @Feuerwehr_Koeln was between Wednesday and Friday around 3750 times in use and also helps out on Saturday in #Erfstadt. In #Cologne, the #Rhine level is currently dropping. All news and events around the #Flood in the Newsblog.”

As can be read, the first tweet mentions the swelling of the Rhine as well as the possibility of a new storm, whilst the second tweet mentions, among other things, the dropping water level of the Rhine in Cologne.

4.2.1.3. The contested public opinion frame on social media during the Rhine flooding of July 2021

The contested public opinion frame was the third-most used frame. It was used 24 times (9.76 percent) and averaged 3.04 comments, 11.13 retweets, and 36.74 likes per tweet after taking out the outlier. When comparing this with the assessment criteria in Table 5 on page 25 and calculating the weighted average score, it can be concluded that the identification frame scores an overall of 3.4 points, which indicates a moderate extent of impact. Only one of the tweets matching this frame was Dutch, which is explained by the fact that the Rhine in the Netherlands did not flood. All tweets were sent by those having no authority in the crisis management of the Rhine flooding of July 2021

Only one significant peak was found in the use of this frame, which was on 15.07.2021. This can be explained by the rapidly rising water levels that day and night. In turn, this led to more attention for the Rhine on Twitter, also from those having contested views. Tweets matching this frame posted on this either discuss whether this flood is ordinary or not, climate change, or what the cause of this flood might be. The tweet below gives an example of the former.

TWEET

“The 🏠 with this level is 400 meters from the Rhine. For the yellow flood levels, the current flood would have to add another 5 to 7 meters. Wikipedia classifies only one flood as a century flood. It is claimed that century floods increase...”

As can be read, this tweet mentions how the Rhine flooding of July 2021 differs from century floods, insinuating that this is an ordinary flood.

4.2.1.4. The responsibility frame on social media during the Rhine flooding of July 2021

The responsibility frame was the second least used (excluding the no frame). It was found 21 times (8.57 percent). It was only found in German tweets, which can be explained by the fact that the Rhine only flooded in Germany. On average, the tweets matching this frame were commented on 8.57 times, retweeted 4.48 times, and liked 33.24 times. When comparing this with the assessment criteria in Table 5 on page 25 and calculating the weighted average score, it can be concluded that the identification frame scores an overall of 2.4 points, which indicates a small extent of impact. Last, all tweets were sent by those having no authority in the crisis management of the Rhine flooding of July 2021.

Two peaks were found in the use of this frame. The first of these was on 15.07.2021, which can be explained by the rising water levels on the Rhine in Germany that day and night. Attention for the Rhine on Twitter rose, as well as the number of tweets reflecting responsibility for the flooding. Tweets matching the frame on this day either expressed that politicians or humanity itself were responsible for the flooding. The tweet below highlights an example of the latter.

TWEET

“With respect, the floods are not only caused by climate policy, but rather by the stupidity of humans to seal everything, to change and straighten river courses (e.g., Rhine) and to build on floodplains. The dams in Aich were built by people to retain water.

The second, similar, peak is seen on 19.07.2021 and can be explained by the fact that it became publicly known that the EFAS had already warned Germany and Belgium four days in advance of the flooding. This led Twitter users to post about this, hence the peak in tweets matching this frame. The tweet below reflects this.

TWEET

“The first signs of the flood disaster in D were detected by satellites 9 days earlier. 4 days before the floods, the European Flood Warning System (Efas) warned the governments of BRD and Belgium of floods on the Rhine and Meuse.....”.

As can be read, this tweet mentions that EFAS already detected possible flooding days in advance and warned the governments of Germany and Belgium.

4.2.1.5. The (economic) consequences frame on social media during the Rhine flooding of July 2021

The (economic) consequences frame was the least used. It was found 17 (6.94 percent) times. On average, the tweets matching this frame were commented on 6.94 times, retweeted 3.82 times, and liked 14 times. When comparing this with the assessment criteria in Table 5 on page 25 and calculating the weighted average score, it can be concluded that the identification frame scores an overall of 1.5 points, which indicates a small extent of impact. Only one tweet was sent by an authority in the Rhine flooding of July 2021, the remaining 16 were sent by those with no authority in the crisis management of the Rhine flooding of July 2021.

This frame's peak was on 14.07.2021 and consisted of only Dutch tweets. This can be explained by the fact that others rivers in the Netherlands (Waal and Meuse) already had started to show higher water levels, leading to a rise in attention for the Rhine on Twitter as well. Tweets matching this frame were posted about an expected rise in the water level of the Rhine. The tweet below provides an example of this.

TWEET

“There is already considerable #water nuisance in southern #Limburg and it could get much worse today and tomorrow! There will be an additional 100-150mm of rain! The surrounding rivers such as the #Maas and the #Rhine will also be flooded with rainwater. ☁”

As can be read, this tweet addresses expected rain and as a consequence of that, flooding of the Meuse and Rhine.

4.2.1.6. The no-frame

Ten times (4.08 percent) no frame was found in the tweets. Since none of the five frames was identified, it is impossible to relate it to the public discourse, therefore it makes no sense to investigate them any further.

4.3. Reflection of the cases and public discourse

In this section, a reflection is given on the crisis management of the Dutch and the Germans regarding the Rhine flooding of July 2021, as well as the transboundary crisis management, and the public discourse by connecting it to the interviews. This is done by discussing the impact of each frame on the transboundary crisis management process. However, to prevent repetition, the impact of all frames on the accounting stage is discussed before.

During the interviews, the importance of social media in crisis mapping and monitoring for false information was acknowledged. Both waterboard Rivierenland and Safety Region South-Limburg, as well as the Wuppertal Fire Department, mentioned taking into account what is being said on social media and the monitoring of false information.

EXCERPT FROM AN INTERVIEW

“During the floods, Twitter was used very heavily to provide information in response to our alerts. In addition, it was used very intensively to follow up on these alerts [...] Twitter was also used to receive information and to be able to filter false information”.

EXCERPT FROM AN INTERVIEW

“Because crisis communication is about three things: countering information deficits, giving instructions, and connecting to emotions that are there from a certain idea. As a government, yes, that's your administrative duty, so to speak. If there is something going on, that disrupts, say, the daily course of things. Well then, all sorts of emotions and feelings come with it. It is then up to the responsible government to respond. [...] Those information deficiencies and people's behavior that, say, in the absence of that, can lead to damage or, on the contrary, can lead to damage when they occur.”

For the excerpt below it is necessary to explain what is meant by two-sided. On the hand, this refers to using social media to inform citizens. On the other hand, it refers to using social media to extract information (for crisis mapping) and to monitor for false information.

EXCERPT FROM AN INTERVIEW

“Two-sided actually. On the one hand, keeping the people or the citizen informed and up to date and on the other hand getting an image of the situation ourselves.”

Ultimately, based on the interviews it can be concluded that social media was used to collect information in crisis mapping, as well as to monitor for false information during the Rhine flooding of July 2021.

Moreover, since all frames are used in crisis mapping and monitoring for false information according to the theoretical framework, and all frames were found, it can be concluded that all frames had an impact on the accounting stage. The extent to which corresponds to the impact score of each frame, meaning that the human-interest frame and identification frame had a large impact, followed by the contested public opinion frame with a moderate impact and concluded with the responsibility frame and the (economic) consequences frame with a small impact.

4.3.1. Reflecting upon the frames

In this paragraph, a reflection is given on the impact of all frames on the transboundary crisis management process as discussed in the theoretical framework.

First, besides being used in the accounting stage, the human-interest frame was used in the response coordination stage. In that stage, it was used to enhance social cohesion and further good causes. The importance of this was also reflected in the interviews with waterboard Rivierenland and Safety Region South-Limburg, which is highlighted in the excerpts below.

EXCERPT FROM AN INTERVIEW

“We certainly engage through social media. That is with the goal of connecting people to the goals of the organization.”

Regarding the excerpt below, administrative duty refers to being clear to the public about what information is correct, and what to do and to correspond and take into account the (different) emotions of the public.

EXCERPT FROM AN INTERVIEW

“Because crisis communication is about three things: countering information deficits, giving instructions, and connecting to emotions that are there from a certain idea. As a government, yes, that's your administrative duty, so to speak.”

Also, the human-interest frame proved to be quite popular. As mentioned, this frame averaged 1.86 comments, 6.30 retweets, and 32.26 likes, which is close to average. However, when looking at the tweets sent by authorities, the average popularity is much higher. Tweets matching this frame sent by authorities averaged 5.75 comments, 15.25 retweets, and 133.50 likes per tweet, which is much higher

than the overall averages. As such, these tweets reached many more people than only Twitter users following the authorities' accounts. In doing so, the authorities (and thus crisis managers) were successful in enhancing social cohesion and good causes via the human-interest frame on social media. Based on the interviews, the popularity of the tweets sent by authorities, and the fact that the human-interest frame scored a weighted impact score of 4.1, it can be concluded that the human-interest frame had a large impact on the response coordination stage. Contrary, since the human-interest frame was not used in the sense-making and meaning-making stage, its impact there was zero. Concluding, the human-interest frame had a large impact on the accounting stage and the response coordination stage, while it had no impact on the sense-making and meaning-making stages.

Second, besides being used in the accounting stage, the identification frame was used in the response coordination stage and the meaning making stage. In the response coordination stage, the identification frame was used to warn people via social media, as well as to instruct first responders, inform and advise citizens and create communities of like-minded people. In the meaning making stage, it was used to inform citizens. This all was reflected in the interviews with both Safety Region South-Limburg and waterboard Rivierenland.

EXCERPT FROM AN INTERVIEW

“If there's an incident [...] we'll communicate about it via Twitter. If it becomes something bigger or if the impact of certain things becomes somewhat greater, we'll do that via Twitter and via Facebook. And if it becomes even bigger, we also put a message about it on our website, so during high water we communicated via all those channels: website, Facebook, Twitter..”

EXCERPT FROM AN INTERVIEW

“The moment you have a particular emergency, we usually publish an FAQ online very quickly. Initially it may just be procedure information. If it's something about high water, then we post what we do with high water, we monitor it etc. etc. We're not case specific, just general.

Moreover, just like the human-interest frame, tweets sent by authorities having authority in the crisis management of the Rhine flooding of July 2021 scored higher popularity averages than those sent by others. On average, those tweets were commented on 3.09 times, retweeted 13.82 times, and 39.36 times. Tweets sent by those having no authority in the Rhine flooding of July 2021 only scored 0.91 comments, 5.77 retweets, and 16.63 likes. As such, the tweets sent by authorities reached many more people than

only the Twitter users following the authorities' accounts. Based on that, the interviews, and the weighted impact score of 3.8, it can be concluded that the identification frame had a large impact on the response coordination and meaning-making stage and was used to warn, instruct and advise people and first responders, and to create communities of like-minded people. Since the identification frame was not used in the sense making stage, its impact there is zero. Concluding, the identification frame had a large impact on the accounting, response coordination, and meaning-making stage, while it had no impact on the sense-making stage.

Third, besides having an impact on the accounting stage, the contested public opinion frame can potentially impact the response coordination and meaning-making stage if authorities fail to construct a good and correct overview of the crisis. This is only possible if authorities do not perform accurate crisis mapping and do not actively monitor and correct false or misinformation. As explained at the beginning of this chapter, this was actively done during the Rhine flooding of July 2021. In the excerpt below, this is emphasized as well by a civil servant from the Safety Region South-Limburg.

EXCERPT FROM AN INTERVIEW

“We call that naming the rumour ... and in that way actually debunking the rumours or fake news.”

Moreover, this frame was never used by authorities themselves, and if it was used by others, it covered a range of different topics. Based on this and the interviews it can be concluded that the contested public opinion frame was monitored well in the accounting stage and thus did not have an impact on the response coordination and meaning-making stage. Concluding, the contested public opinion frame had a moderate impact on the accounting stage, but no impact on the sense making, response coordination and meaning-making stages.

Fourth, the responsibility frame. As mentioned at the beginning of this section, all frames were taken into account in crisis mapping and monitoring for false information, which is why the responsibility frame was taken into account as well, even though it was found in only 21 tweets (8.57 percent). Furthermore, the average number of retweets for tweets matching this frame is well below average (see Table 12 on page 38), meaning that these tweets were less often seen and thus had a smaller reach. Concluding, the contested public opinion frame had a small impact on the accounting stage, but no impact on the sense making, response coordination, and meaning-making stages.

Fifth, the (economic) consequences frame. Like the responsibility frame, the (economic) consequences frame had an impact on the accounting stage of crisis management. As mentioned, this frame was the

least-used frame, with only 6.94 percent of all tweets matching this frame. However, since it was found, the tweets matching this frame were included in the crisis mapping and monitoring for false information in the accounting stage. Also, as can be seen in Table 12 on page 38, the average number of comments, retweets, and likes for tweets matching this frame is much smaller than the overall average. In turn, tweets matching this frame had a lesser reach. Concluding, this frame had a small impact on the accounting stage as discussed, but no impact on the sense making, response coordination, or meaning-making stages.

Last, it can be concluded that all frames (except for the no frame) had an impact on the transboundary crisis management of the Rhine flooding of July 2021. However, the extent differs per frame. Overall, it can be concluded that the human-interest frame and the identification frame had the most impact on the transboundary crisis management of the Rhine flooding of July 2021. Both frames had a large impact on the accounting stage and the response coordination stage, with the identification frame also having a large impact on the meaning making stage. The other frames only impacted the accounting stage, with the contested public opinion frame having a moderate impact and the responsibility frame and the (economic) consequences frame only having a small impact.

5. Discussion and conclusion

In this section, the main findings of this research will be discussed, followed by its limitations, implications, and future research.

5.1. Main findings

In this section, the main findings of this research are discussed. This is done by addressing each sub-question, followed by the research question.

5.1.1. Public discourse: helpful tool if used well

After doing extensive research, the public discourse on social media can impact transboundary crisis management positively and negatively. Positively, it can impact transboundary crisis management in four general ways, which all are combinations of Alexander's (2014) theory on the positive usages of social media in crisis management. First, by identifying frames, crisis managers can construct an overview of how a crisis is experienced and felt by the public. This is done in the accounting stage by crisis mapping and monitoring for false information. This contributes to a more coherent response in the following stage. Second, crisis managers can use social media as a warning system and instruct first responders, as well as inform and advise citizens, and create communities of like-minded people by posting messages on social media that match the identification frame during the response coordination stage. As such, a coherent response is created which helps guide the crisis to a good end. Third, by posting messages matching the human-interest frame as well in the response coordination stage, crisis managers attach a human face to crisis management and contribute to enhancing social cohesion. Besides, by mentioning voluntarism or offers of help crisis managers might be able to further good causes. Fourth and last, by posting messages matching the identification frame in the meaning making stage, crisis managers can spread a convincing and coherent narrative about the crisis which helps to guide the crisis to a good end.

The public discourse can hurt transboundary crisis management as well. That is, if the public discourse is mainly determined by the contested public opinion frame, chances are that the public discourse and public opinion of a crisis differ from the view of the crisis managers. As such, public discourse can be used for the spread of rumors and false information, to orchestrate disruption, or to spread fake news (Alexander, 2014; Zhao, 2017; Zhang & Ghorbani, 2020). This is harmful to successful transboundary crisis management, as it makes it difficult for crisis managers to convince the public that their response is appropriate and to convince the public that their narrative is correct to create a coherent response and convincing narrative of the crisis. So, when crisis managers fail to influence the public discourse in a good way - as explained earlier in this section - and the public discourse is mainly determined by the

contested public opinion frame, the public discourse can negatively impact transboundary crisis management.

Looking back at the theoretical framework, it is clear that when crisis managers can influence the public discourse in a good way, all positive usages of social media (i.e., the green circles in figure 6 on page 21) are exploited and contribute to successful transboundary crisis management. However, if they fail to do so and the contested public opinion frame becomes prominent, social media can be hurtful for transboundary crisis management (i.e., the red circles in figure 6 on page 21). Concluding, by making good use of frames to influence the public discourse, the public discourse on social media can impact the transboundary crisis management process in a good way and contribute to a more successful process.

5.1.2. Crisis management of the Rhine flooding of July 2021

Even though both the Netherlands and Germany faced the same crisis, it was managed differently in both countries. In the Netherlands, waterboard Rivierenland was responsible for managing the high water on the Rhine. Since the water never reached above NAP +15.00m, only coordination stage 1 was initiated. As such, the most important measure taken was to start dike monitoring. In Germany, the Bundesländer are responsible for crisis management, which in turn is allocated to individual district governments and municipalities. In NRW, information values are used by the LANUV to inform the latter district governments and municipalities about what to expect regarding the Rhine and its tributaries. Then, the district governments and municipalities themselves determine what measures to take. These differ per district government and municipality. During the Rhine flooding of July 2021, at least 44 times a flood gauge passed information values 2 and/or 3, meaning that built-up areas and larger infrastructure were flooded. Given that, the district governments and municipalities undertook corresponding measures. In RLP, the flood notification service provides reports and warnings based on the expected water levels of the Rhine and its tributaries. For this, a color-coding scheme ranging from green to purple is used, with the purple color code corresponding to large-scale flooding of built-up areas and a flood happening once in over 50 years. During the Rhine flooding of July 2021, the purple color code was issued to the Ahr region. Accordingly, the relevant district governments and municipalities undertook measures to battle the water. However, even though both countries have their own crisis management, there also was crisis management across the border related to the Rhine flooding of July 2021. Starting, both the Netherlands and Germany are members of the ICPR, which was created to ensure sustainable development of the Rhine and to keep it safe. Amongst other topics, the ICPR spread flood risk maps of all member countries, established warning systems along the Rhine that work together closely, spread water levels internationally, and ensured lower water levels of the Rhine before there even was high water. Second, both countries are a member of EMRIC, which focuses on operational management during crises (e.g., sending ambulances and firemen). Third and last, the Dutch waterboards work together with German authorities by sharing crisis management plans, performing

coordinated exercises, and communicating in general (both in the cold and hot phases of crises) via one designated person

5.1.3. The public discourse on the Rhine flooding of July 2021

The public discourse on social media during the Rhine flooding of July 2021 was mostly determined by posts matching the identification frame and the human-interest frame. Together, tweets matching this frame made up over 70 percent (70.61) of all tweets. Both in the Netherlands and Germany these frames were the most used. However, in the Netherlands, the most-used frame was the identification frame, whilst, in Germany, the most-used frame was the human-interest frame. This can be explained by the fact that the Rhine did not flood in the Netherlands. As such, there was a lesser need for people to express emotions or feelings, whilst in Germany, the flooding induced many people to do so. Tweets matching these frames either describe the Rhine flooding of July 2021 (e.g., updates, water levels, instructions, weather reports) or give a human face to the crisis by showing emotions, feelings, or personal experiences. Important to note here as well is that 93.75 percent of the tweets sent by authorities having competencies in the Rhine flooding of July 2021 matched one of these frames. Latter tweets were on average much more popular than those sent by others not having authority in the Rhine flooding of July 2021 and thus had a larger reach. Therefore, it can be concluded that the public discourse on social media during the Rhine flooding of July centered mostly around giving a description or definition of the Rhine flooding of July 2021 or giving a human face to the Rhine flooding by sharing personal stories, emotions, feelings, and the involvement of volunteers.

5.1.4. The public discourse impact on the TCM of the Rhine flooding of July 2021

This research aimed to identify to what extent the public discourse on social media impacted the transboundary crisis management of the Rhine flooding of July 2021. By performing a qualitative analysis including a single case study, desk research, expert interviews, and content analysis of Twitter data, this research shed light on crisis management in the Netherlands and Germany. Furthermore, it highlighted how both countries managed the Rhine flooding of July 2021, how framing on social media can impact transboundary crisis management, and what the public discourse on social media looked like during the Rhine flooding of July 2021. The results indicate that the public discourse on social media can impact transboundary crisis management in several ways. First, the public discourse on social media is largely determined by how a crisis is framed. Regarding this, five frames commonly used on social media to frame crises were identified: the identification frame, responsibility frame, human-interest frame, (economic) consequences frame, and the contested public opinion frame. These frames all can impact transboundary crisis management. However, some frames impact only one stage of transboundary crisis management, whilst others impact more than one stage. That is, the contested public opinion frame, responsibility frame, and the (economic) consequences frame can impact the accounting

stage of transboundary crisis management. The human-interest frame can impact the accounting stage as well, along with the response coordination stage. Last, the identification frame can impact the accounting, response coordination, and meaning making stage. Regarding the Rhine flooding of July 2021, the human-interest frame and the identification frame were the most used frames. In line with Semetko & Valkenburg's (2020) human-interest frame and Zhao's (2017) identification frame, the public discourse in these frames centered around either giving a human face to the Rhine flooding of July 2021 (e.g., personal stories, emotions, feelings) or providing a definition or description (e.g., updates, explanations, instructions).

Corresponding to the above, it can be concluded that the accounting stage and the response coordination stage were affected by the public discourse on social media. All five frames impacted these stages, even though to a different extent. Moreover, both the human-interest frame and the identification frame had a large impact on the response coordination stage. The accounting stage was affected through the use of social media (frames) for crisis mapping and the monitoring for false information, whilst the response coordination stage was affected by the public discourse being used as a warning system, instruction device (for the public and first responders), as a way of giving advice and creating communities of like-minded people.

Ultimately, since the public discourse was mostly determined by the human-interest frame and identification frame, the fact that those had a large impact on the accounting, response coordination and meaning making stage, and that this was reflected in the interviews as well, it can be concluded that the public discourse on social media did impact the transboundary crisis management of the Rhine flooding of July 2021 up to large extent.

5.2. Limitations

At this point, it is necessary to talk about the limitations of this study. As was mentioned in the methodology chapters, this study opted for a single-case study design. Single-case study designs are perfect for gaining detailed insights into the research case. However, they lack generalizability. That is, what is gained in detail, is lost in the generalizability of the results. For this study, this means that the gained insights into how the public discourse on social media can impact transboundary crisis management are only applicable to the floodings on rivers along the Dutch-German border. Although, it could be argued that results could be similar for other crises spanning the Dutch-German border where the public discourse on social media followed the same pattern. A second limitation of this study was found in the interviews. The number of interviewed experts remained rather limited and consisted of only Dutch experts and one German expert who agreed to answer some questions via e-mail. Interviewing more German experts as well would have strengthened the research. Moreover, semi-

structured interviews can – even though unconsciously – be a source of bias. This might lead to subjectivity among both the researcher as well as the interviewee.

5.3. Implications and future research

Unlike many other studies on the Rhine flooding of July 2021, this study did not focus on forecasting, the performance of warning systems, or other weather-related topics (Kreienkamp et al., 2021; Saadi et al., 2023; Wilgan et al., 2023; Thieken et al., 2022). Rather, it focused on the public discourse on the Rhine flooding in both the Netherlands and Germany. Furthermore, only one other study was found that discussed the public debate about the Rhine flooding and this was focused on comments found below the coverage of the German public television channel (ZDF) (Kühne et al., 2021). This makes this study a unique addition to the field. As such, several lessons can be learned from this study. First, the public discourse on social media can contribute to smoother crisis management. That is, it can be helpful in both the collecting and spreading of information. If this is done well, it contributes to smoother and more successful crisis management. Second, by focusing on the identification and human-interest frame when posting messages on social media, crisis managers can quickly spread a coherent and compelling story as well as take away information deficits, create social cohesion and promote voluntary involvement in crisis management. This contributes to a coherent response and narrative and eventually more control of the crisis. Third, this research highlighted transboundary crisis management between the Dutch and Germans about the Rhine river. During interviews, it was noted that this mostly centers around operational management and the sharing of plans instead of writing plans together. Even though this is difficult due to the very different judicial frameworks in both the Netherlands and the German Bundesländer, it is advised to explore the possibilities of this.

Regarding further research, there is a lot to win. First of all, since this research only made use of Twitter for the collecting of social media data and other platforms (e.g., Facebook, Instagram) are used often during crises as well, further research needs to include these as well. Second, since this research made use of a single-case research method, it is advised for further research to perform larger quantitative studies into the role of social media in TCM. Moreover, it would also be good to perform such studies along other borders as well. Third, because flood management and crisis communication is decentralized in Germany up to a large extent, it is difficult to get a complete overview of how social media was used by crisis managers there during the flooding. For further research, this is something to consider as well.

5.4. Conclusion

This research aimed to see whether the public discourse on social impacted the transboundary crisis management of the Rhine flooding of July 2021. With the use of qualitative methods by means of performing desk research, a case study, expert interviews, and content analysis of Twitter data, this

research concluded that the public discourse did impact transboundary crisis management of the Rhine flooding of July 2021. By monitoring all frames on social media, crisis managers can use them in the accounting stage of transboundary crisis management. Moreover, by using the identification frame and human-interest frame in posts on social media, the public discourse on social media can contribute to a more coherent response in the response coordination stage of transboundary crisis management and contribute to a more coherent narrative in the meaning making stage of transboundary crisis management. Since this research provided a single-case study, it still needs to be researched whether the impact of the public discourse on social media is the same for other cases as well. Moreover, since the public discourse does not only take place on Twitter, future research needs to include other social media platforms as well. This will hopefully result in a more complete overview of how the public discourse on social media can impact transboundary crisis management and as such contribute to successful transboundary crisis management in the future.

6. References

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7. Appendix

7.1. Materials for collecting and analyzing data

Table 13: Codebook

Code	Code definition	Examples
Identification frame	“Gives a definition or description of the event. It includes posts that describe the event, offer a definition or list related issues regarding the event” (Zhao, 2016, p. 51).	<ol style="list-style-type: none"> 1. "The #highwater wave in the #Maas almost reaches #Roermond. There will be "Extreme high water" in South Limburg shortly after noon. The Rhine at Lobith is now starting to rise: https://weerplaza.nl/weerinhetnieuws/live-blog/waterproblemen-nog-niet-voorbij/7204/" 2. Preparations #flood protection Currently, the #Fire Department is making preparations due to expected increased water levels on the #Rhine and #Moselle. Constructional preparations are being made to be able to close the passages to the Rhine in #Neuendorf if necessary. #wesecureKOBLENZ
Responsibility frame	“This frame presents an issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual or group” (Semetko & Valkenburg, 2006, p. 96).	<ol style="list-style-type: none"> 1. The first signs of the flood disaster in D were detected by satellites 9 days earlier. 4 days before the floods, the European Flood Warning System (Efas) warned the governments of FRG and Belgium of floods on the Rhine and Meuse.... 2. #Laschet says in #Hagen: "#NRW is the federal state that makes the greatest contribution to #climate protection." He still feels like joking. #flooding #climatecrisis #climatecrisisISTnow #Altena #Ahrtal #Eifel #Ruhr #Rhine #wuppertal #Solingen #flood #cdu #btw21
Human-interest frame	“This frame brings a human face or an emotional angle to the presentation of an event, issue or problem”	<ol style="list-style-type: none"> 1. I fear that tomorrow we will talk about the worst #flood situation since 2002. I hope for the residents of #Rhine, #Mosel, #Ahr and other rivers that they get off as lightly as possible. #Flood 2. It has only been 6 days since we sat and enjoyed the Rhine so peacefully Now the Meuse and Geul but also the other big rivers and waters have suddenly become dangerous We are sincerely concerned for all those affected by the massive flooding

	(Semetko & Valkenburg, 2006, p. 95-96).	We sympathize with you
(Economic) consequences frame	“This frame reports an event, problem or issue in terms of the consequences it will have (economically) on an individual group, institution, region or country” (Semetko & Valkenburg, 2006, p. 96).	<ol style="list-style-type: none"> 1. Swiss news only dystopian: The Rhine is closed to shipping due to high water. But 10% of the imports come over it. Due to the heavy rain, plants are rotting in the fields. "The supply of Swiss vegetables can no longer be guaranteed." 2. Press release of the Cologne police: Major damage situation in the Rhine-Sieg district and the district of Euskirchen/ Addendum number 5 - Info at #hochwasser
Contested public opinion frame	“This frame stresses contested viewpoints and positions among individuals and social groups” (Zhao, 2016, p. 51).	<ol style="list-style-type: none"> 1. 1342: Magdalen flood 1480:Flood Rhine 1501: HW in M-Europe 1613:Thuringian Flood A small selection of historical HW,as they occur fatally again and again. The current HW is supposed to influence the BT elections as a disaster caused by climate change. 2. Cartel parties and their mouthpieces (newspapers, broadcasters) are exploiting the very serious flooding in #Limburg and elsewhere in the #Rhine and #Meuse river basins for their climate bluster. Nasty game on the backs of the victims. Shame! Nothing to do with climate change.
No frame	When a Tweet does not fit any of the other five frames, it is coded “no frame”.	<ol style="list-style-type: none"> 1. The Roskam in Katwijk aan den Rijn has gained a work of art. The beautiful painting '500,000 years of climate, man and animal' is a climate line of historical paintings that was painted by miller Bouma on a 6 meter long mill canvas. The print now adorns the Roskam 2. On the other hand, it should especially not be concealed that the State coercion is maximal. Demonstrators at the PI in Alphen a/d Rijn for the #FreeWouter action were even visited at home by local police with a warning, no longer to demonstrate there..... B

Table 14: Interview questions

Research Interest	Questions
<p>1) General information on the interviewee's position, role, experience etc.</p>	<ul style="list-style-type: none"> ○ What is your name? ○ What is your position at ? ○ How long have you been working at ... ? ○ How long have you been working with crisis management? ○ What was your role during the floodings of July 2021? - Did you experience such a crisis before when working in this field?
<p>2) Information on (transboundary crisis management)</p>	<ul style="list-style-type: none"> ○ What plans do you use regarding crisis management? ○ Was this plan used during the flooding? ○ What is the strategy regarding crisis communication? ○ How is this coordinated with the persons involved? ○ Is there a crisis communication strategy? - To what extent was this followed? - Did you involve social media in this crisis communication? - Is there room for interaction with citizens in this communication? - If so, how do you reply to citizens commenting negatively? Or stating false information? ○ Are crisis management plans internationally (e.g., Belgium, Germany) coordinated?
<p>3) Information on the use of social media</p>	<ul style="list-style-type: none"> ○ Do you use social media in your job? - What social media platforms are used?

	<ul style="list-style-type: none"> - What kind of messages/posts does your organization post? And during crises? o Why does your organization use social media? o Do you feel that social media is an important aspect of your work?
<p>Information on fake news</p>	<ul style="list-style-type: none"> o Do you know what fake news is? o Do you think fake news was present about the floodings of July 2021? - Did you notice fake news? How did you notice this? - Why do you think this was posted/spread? o Did you have to deal with fake news during your career? o Is there a plan on how to react to fake news in your current job? - Do you consider the possibility / presence of fake news when taking decisions? o Do you feel that fake news hinders effective crisis communication? - And crisis management? o If so, how does fake news hinder this o If not, why do you think it does not hinder?

7.2. Transcripts expert interviews

TRANSCRIPT WATERBOARD RIVIERENLAND

Spreker 1

Verder denk ik, maar goed, zal ik maar gewoon beginnen dan. Nou, de eerste vraag is vrij standaard wat zijn jullie functies binnen de binnen de organisatie?

Spreker 3

X begin jij?

Spreker 2

Oké. Nou, mijn naam is X. Ik werk nu denk ik 12 jaar bij Waterschappen Rivierenland. Op het moment ben ik senior communicatieadviseur. Bij het team, communicatie van waterschappen. Nou ja goed ik doe communicatiewerk in de breedte, eigenlijk alles met corporate communicatie, dus ook de projectcommunicatie perscommunicatie, et cetera et cetera. Ik heb ook het beleidsveld onder mijn hoede, want bij web communicatie hoort. Ik ben ook actief in de calamiteitenorganisatie. Daar heb ik verschillende rollen. Ik ben coördinator omgeving dan in die zin. En, ook strategisch adviseur. Dus ik wissel wel een beetje van rol.

Spreker 1

Duidelijk denk ik. Je werkt al 12 jaar, zei je toch mag mag ik je zeggen trouwens?

Spreker 5

Ja zeker? Nee, precies.

Spreker 1

Wat was uw rol toen? Jouw rol tijdens het hoogwater van vorig jaar bedoel ik dan.

Spreker 2

Ja het is alweer een tijdje geleden, volgens mij ben ik inderdaad van rol geswitcht van coördinator omgevingsanalyse naar ik meen dat ik daar ook strategisch adviseur ben geweest. Maar, nou ja, we zijn de afgelopen tijd vaker opgeschaald geweest. Het wordt allemaal een beetje een blur dan.

Spreker 1

Nee, Dat is te begrijpen.

Spreker 2

Ja, ik zou ook nog voor je na kunnen gaan wat ik precies heb gedaan. Ik ben wel actief geweest, maar in welke hoedanigheid weet ik niet meer.

Spreker 3

Zal ik even in LCMS kijken?

Spreker 2

Ja.

Spreker 3

Wacht, dan zal ik mezelf eerst voorstellen. Kijk ik daarna in LCMS. Ik ben X. Ik ben adviseur crisisbeheersing sinds november 2019. Dus nu 3 jaar.

Spreker 3

En ik, was adviseur crisisbeheersing tijdens hoogwater juli 2021. Samen met mijn collega Rick. Ik heb er de hele periode voor ons bijgezeten, en dat was eigenlijk van begin dat we niet precies wisten hoe hoog de waterstand zou gaan worden tot de afloop. Maar het was voor ons uiteindelijk in het gebied waar er niet extreem veel consequenties waren. Dus dat. En dat was dus ook mijn rol In de crisisorganisatie en wat dat betekent binnen onze organisatie als adviseur crisisbeheersing is dat je adviseert over het proces van crisisbeheersing en daarbij ondersteunt.

Spreker 1

Ja duidelijk. Nou X zei al, je hebt al wel eerder met dit crisissen te maken gehad. Heb jij dat ook gehad X, voordat je of sinds je begonnen bent bij het waterschap?

Spreker 3

Met dit soort crisis niet. Dit was de eerste echt hoogwater dat er echt zoveel aandacht op zat. Ja er is altijd wel aandacht voor maar meestal hebben we dan zoiets van. Ja we schalen op vanwege de landelijke richtlijnen en de eventuele communicatie die daarbij komt kijken met een paar kleine coupures sluitingen en dat is verder niet heel spannend. Dit was de eerste echt spannende. Ik wel andersoortige crises meegemaakt. Milieuverontreiniging, breuken, corona en andere zaken. Dus het was niet mijn eerste crisis maar wel de eerste van deze aard en op deze manier.

Spreker 1

Ja duidelijk. Maar je noemde net al dat je landelijke richtlijnen hebt voor dit soort voor dit soort crisissen. Hebben jullie daar ook standaard zelf vanuit het waterschap nog een bepaald plan voor of een bepaalde strategie met betrekking tot crisismanagement?

Spreker 3

Ja, we hebben een behoorlijk uitgebreide document bank. Dus we hebben een algeheel crisisplan, dus dat is hoe we over het algemeen een crisis aanvliegen. Daarnaast hebben crisis bestrijdingsplannen met onderliggende procedures en werkinstructies en een van die crisis bestrijdingsplannen is het crisis bestrijdingsplan hoogwater. Daarin staan de risico's, de opschalingscriteria, wie daar dan bij moet zitten, de eerste maatregelen, de netwerkpartners en bijvoorbeeld ook wanneer dijkbewaking ingeschakeld moet worden et cetera et cetera. En naar aanleiding van dat hoogwater hebben we die ook weer op bepaalde punten wat aangepast.

Spreker 1

Oké en dat gaat dan op basis van waterstanden. Of hoe moet ik me dat voorstellen?

Spreker 3

Ja, dat is landelijk zijn de waterstanden afgesproken. Op basis daarvan de kleurcodering ook verandert. En wij hebben gezegd, wij houden die waterstanden aan en schalen op wanneer de trend voorspelt dat die daarna nog hoger wordt dus als hij hem net aantikt en weer naar beneden gaat is er eigenlijk niet zoveel aan de hand. Mocht je informatie willen, kun je bij die persoon terecht, maar dan is er eigenlijk niet zo heel veel aan de hand, dus alleen als het echt blijft stijgen die trend, dan schalen we op, op basis van die waarde.

Spreker 1

Oké duidelijk. En die zijn vorig jaar dus ook gebruikt met het hoogwater. En aan de hand daarvan ook weer aangepast. Zei je net geloof ik toch?

Spreker 3

Ja, Maar dat ging voornamelijk over dijkbewaking, dus het. Dus het was meer een woordelijk verhaal. Dus als wij letterlijk deden wat erin stond, dan. Dat moet zeggen. Laat me even over de formulering nadenken. Nu is er twee keer per dag op de dijkpost gelopen? Op bepaalde vakken en er stonden eigenlijk twee varianten, dus of je gaat alleen dijkbewaking doen op de stukken waar uit ons systeem komt dat daar gelopen moet worden. En aan de andere kant stond er dat we ongeacht waar, hoe, wat iets in dit trant. Dat er twee keer per dag gelopen moest worden, ondanks dat er op sommige stukken eigenlijk niet meer zoveel te zien was.

En uiteindelijk is er nu in juli gekozen om twee keer per dijkpost te lopen, dus een beetje de safe route. Terwijl we nu hebben gezegd, oké we snappen dat we dit plan wilden volgen en dat op basis daarvan wordt daarvoor gekozen, maar we hebben ook gezien dat dat en niet goed is voor de motivatie van de mensen die daar moeten lopen en het ook was ook gewoon niet nodig voor de veiligheid dus. Dus we hebben het nu helemaal toegeschreven naar afhankelijk van wat het systeem meldt. Dus we gaan dijkbewaking inzetten op de stukken waar dat nodig is. Dus dat, maar dat is de grootste verandering, maar niet de opschaling criteria.

Spreker 1

Duidelijk verhaal. Je noemde net al bijvoorbeeld de dijkbewaking. Is dat onderdeel van jullie eigen waterschap of van externe partijen die dat doen?

Spreker 3

Onze dijkbewaking is opgebouwd uit een gedeelte interne medewerkers en een groot gedeelte vrijwilligers. Daarin worden er groepen van drie gevormd. Waar in de basis, één medewerker van ons waterschap is en dan twee vrijwilligers bij zitten. Zodat er altijd iemand van ons waterschap bij zit. Dat is natuurlijk wel afhankelijk als er veel mensen ziek, zwak, misselijk zijn iets niet trant, dan kan het nog wel eens wisselen, want we hebben hele ervaren vrijwilligers, maar in de basis is dat de afspraak die we hebben. Dus eigen medewerkers en vrijwilligers.

Spreker 1

En hoe wordt dat plan gecommuniceerd en dan met name naar de vrijwilligers toe?

Spreker 3

Ik ga niet helemaal je vraag beantwoorden, maar ik ga wel aangeven hoe wij onze vrijwilligers opleiden, want zij krijgen gewoon een opleidingstraject. Dus ze kijken niet van oh ja hier heb je een plan, want daar heb je uiteindelijk niet zoveel aan. Dus zij hebben in ieder geval een opleiding – een basisopleiding - van meerdere dagen, 3 dagen. Daarnaast hebben ze elk jaar een oefening. Dat heet bij ons HoWaRi: Hoogwater Oefening Rivieren. Die is in december en die je misschien nog wel eens op het de NOS terug.

Spreker 1

Oké.

Spreker 3

Die hebben we eigenlijk jaarlijks. En, daar worden elke dijkpost, want we hebben net als het rivierengebied dijkringen. Op elke dijkpost wordt dat gewoon één keer per jaar geoefend. Dus we hebben nu net bijvoorbeeld een andere oefening, die niet HoWaRi is geha maar wel met andere,

bijvoorbeeld defensie geoefend en dat was alleen dijkpost 5 als ik het goed zeg. Sleeuwijk in ieder geval nou, die doet dan niet mee elders in december, maar de rest doet dan wel mee. Iedereen wordt ieder jaar in ieder geval 1x geoefend.

Spreker 1

Oké en bijvoorbeeld in de situatie, zodat het echt acuut hoogwater is, worden die mensen dan gebeld of komen die zelf in actie of hoe werkt dat?

Spreker 3

Nee, die komen niet vanzelf in actie. De dijkpost wordt dan ingericht en we hebben informatie coördinatoren per dijkpost die lijsten hebben en die gaan dan bellen. En die maken ook de roosters en die zorgen dat dat de dijkpost gereed is en dat al hun materialen klaarstaan. We hebben bijvoorbeeld materiaal kisten met dingen die ze nodig hebben om dat te kunnen doen. Nou ja, daar komt heel veel bij kijken, maar daar hebben we mensen voor die dat regelen en die mensen opbellen en die daar de roosters van maken.

Spreker 1

Oké duidelijk. Misschien niet helemaal voor jullie relevant, maar hebben jullie ook plannen afgesteld met buurlanden, met Duitsland en België bijvoorbeeld?

Spreker 3

Ja, We hebben toevallig net nog het Duitse plan in de mailbox gekregen. En onze plannen worden elke 4 jaar, onze crisisplannen, herzien en die gaat dan ook naar onze netwerkpartners, inclusief de Duitse partners. En we hebben ook afgelopen januari begonnen met de Duitse partners geoefend.

Spreker 1

Oh ja.

Spreker 3

Mijn Duits is waardeloos trouwens, dus vraag me niet hoe ik het uit moet spreken. Daar hebben we mensen voor die dat beter kunnen.

Spreker 1

Nee, mijn Duits is ook niet fantastisch hoor dus dat is geen probleem. Nou, jullie communiceren dus wel met de Duitsers, begrijp ik maar zijn er ook als het ware echt plannen samengesteld? Bijvoorbeeld er gebeurt stroomopwaarts iets, dat jullie stroomafwaarts iets moeten doen? Of gaat dat meer op een informele basis?

Spreker 3

Oh, even kijken hoe ik dat goed zeg. We hebben wel gesprekken met elkaar over hoe we dat doen, wat we voornamelijk hebben is, we hebben één persoon voor het netwerk. Die ook Duits kan, die die kant op gaat als het eenmaal nodig is. En bij de afgelopen oefening hebben we ook geoefend dat er een Duitse netwerkpartner bij ons komt en die hebben dan ook contact. Maar dat is tijdens de warme fase. Wat jij bedoeld is volgens mij, zijn er vooraf al afspraken gemaakt. Ja, die plannen zijn wel op elkaar afgestemd, maar ook daar gaat het soms wat moeizaam met de afstemming en wie je moet hebben. En dat is allemaal mooi opgeschreven, maar in de praktijk is het soms de vraag komt dat dan ook uit? De laatste keer hebben we best nog wel gezien, ook in juli, dat er best nog wel contact is geweest. En die persoon die dus ook naar Duitsland gaat en de contacten ook in de koude fase heeft met de Duitsers partners doet

dat bijvoorbeeld ook voor Rijn en IJssel. Dus 1 persoon doet dat voor 2 waterschappen en die kennen elkaar ook en zoeken elkaar weleens op.

Spreker 1

Dus als ik het goed begrijp, zijn er wel afzonderlijke plannen, maar er wordt wel gecommuniceerd met elkaar over die plannen en ze worden enigszins op elkaar afgestemd.

Spreker 3

Ja en volgens mij zijn er ook al wat afspraken. Volgens mij zijn er wel afspraken gemaakt met de Duitsers, alleen ja ik wet niet in welke gradatie dan dat zou ik moeten navragen.

Spreker 1

Oké dan, het waren de vragen over het crisismanagement. Wel ongeveer, denk ik. Dan heb ik nog wat vragen over sociale media en die zijn eigenlijk ook belangrijkste voor mij. En de eerste vraag is, vrij duidelijk? Gebruiken jullie sociale media in jullie dagelijkse werk. En, met welke platforms is dat dan? Is dat het met bijvoorbeeld alleen Facebook of zijn meerdere platforms of ook jullie website ook, al is dat niet echt sociale media natuurlijk.

Spreker 2

De platformen die we nu onder de naam Waterschappen Rivierenland gebruiken zijn Twitter, Facebook, Instagram, LinkedIn, YouTube.

Spreker 1

Dus alles eigenlijk alles wat een beetje relevant is dat dat wordt wel gebruikt. Dat snap ik op zich ook wel. Wat voor berichten plaatsen jullie daarop? Zijn dat meer informatieve berichten of gaan jullie ook in gesprek met mensen die reageren op jullie posts of hoe moet ik dat zien?

Spreker 2

Gewoon in het algemeen bedoel je?

Spreker 1

Ja, in zowel de warme en koude fase dan.

Spreker 2

Ja, nou ja, goed. Het is natuurlijk wel een verschil tussen een warme en koude fase. In de koude fase gebruiken we sociale media, ja, bij een hele lijst. Ten eerste, ja noem het corporate communicatie en dus zeg maar hé de organisatie en de taakuitvoering zichtbaar te maken. Nou, ja, goed niet iedereen kent de wetenschappen, maar iedereen moet een belasting gaan betalen. Nou ja, mensen willen graag weten waar gaat hun geld heen. Ook in die behoefte, daarin proberen wij in te voorzien. We gaan zeker ook de dialoog aan via sociale media. Hier zit meer het doel van mensen binden aan de doelen van de organisatie. Tegelijkertijd heeft het ook te met wat wij noemen het reachplan hè? Dus dat mensen ons kunnen bellen en schrijven, contact met ons zoeken. Dan beantwoorden wij de vragen ongeacht via welke manier die binnenkomt. Dus wij hebben bijvoorbeeld ook een servicegarantie waarin staat dat wij nou ja, binnen een bepaalde termijn reageren op vragen. En sociale media, de platformen waar wij zichtbaar zijn met een bedrijfsaccount vallen daar ook onder.

Spreker 1

En bijvoorbeeld. Ik hoorde van X dat bij de Veiligheidsregio Zuid Limburg doen ze het zo dat ze niet specifiek op iedere vraag reageren, maar eens in de zoveel tijd een Q & A doen. Doen jullie ook zoiets or reageren jullie echt specifiek op iedere relevante vraag?

Spreker 3

Ja dat is een goede vraag. Dat ligt maar aan de hoeveelheid vragen die je krijgt en het soort vragen. Dus als je iets opgeschaald bent, dan wordt de sociale media een onderdeel van de mix die je gebruikt enerzijds om de vragen te beantwoorden en anderzijds informatiekorten op te lossen. Want crisis communicatie draait om drie dingen: informatiekorten tegen te gaan, instructies te geven om zo schade te beperken en aansluiting te geven bij emoties die er leven vanuit het vanuit het idee van. Nou ja, als overheid, ja, is dat je dat je je bestuurlijke plicht Als het ware. Als er iets gaande is, dat zeg maar de dagelijkse gang, de gang der dingen verstoort. Nou, er komen allerlei emoties en gevoelens bij los. Nou aan de verantwoordelijk overheid is dan de taak om daarbij aan te sluiten. Vandaar dat wij dan zeg maar, hè? Die informatiekorten en gedrag van mensen die daar zeg maar bij uitblijven kunnen leiden tot schade of juist weeroptreden tot schade kunnen leiden nou en gevoelens, emoties et cetera die de situatie losmaakt die brengen wij naar elkaar in de omgevingsanalyse. En vervolgens gaan we daarmee aan de slag.

Die informatiekorten die ja, die worden dan inderdaad beantwoord via sociale media als die via sociale media gevraagd worden. Ja, en zijn het er maar 3 tot 4 dan kunnen wij gewoon reageren op basis van onze attributies die wij dan zeg maar eigenlijk direct klaar hebben. Dus meestal op het moment dat je een bepaalde calamiteit hebt, dan publiceren we meestal online al snel een FAQ. In de eerste instantie kan het gewoon procedure informatie zijn. Gaat het iets over hoogwater, nou ja goed hé, wat doen we met hoogwater, we houden het in de gaten etc. Etc. We zijn niet geval specifiek, maar gewoon algemeen. Dat zie je al vrij snel. Op het moment dat je maar 3 vragen krijgt via sociale media, dan beantwoord je die gewoon direct op basis van die attributes. Worden dat er dan heel veel, dan schakelen we inderdaad over. Dan gaan we niet specifiek in op iedere vraag. Dan zullen we om de zoveel tijd zeggen: de meeste vragen die we binnen krijgen gaan hierover: hier staat meer informatie. Dat ligt ook een beetje aan de situatie.

Spreker 1

Ja, dan kan ik me voorstellen duidelijk, dus jullie hebben wel echt een plan. In elk geval een strategie om te gaan met reacties. En de dialoog met de burger.

Spreker 2

Ja volgens mij hebben wij ook een crisis communicatieplan. Volgens mij is die onderdeel van die catalogus, toch X?

Spreker 3

Ja onder het crisisplan zit inderdaad het crisis communicatieplan en daar is nog een uitvoeringsfase document ook van ook. Dus dat er twee: een wat meer strategisch en een wat meer uitvoerend.

Spreker 2

Dus nou ja, goed naar aanleiding van een opschaling zullen we ook, net als de andere plannen zullen dat een beetje bijstellen naar aanleiding van wat ze zijn wat ze tegenkomen. Wat kan beter, enzovoort. Nou ja uiteindelijk zijn we dat ook voortdurend aan het updaten. Dus ja. Nee, we doen het allemaal wel op basis van plannen en materiaal dat we voor een deel zeg maar van tevoren al hebben gemaakt.

Spreker 1

Oké duidelijk.

Spreker 3

Neemt niet weg dat het volgens mij altijd een kwestie van gevoel is waar het omslagpunt ligt en gewoon altijd met logisch verstand naar dingen wordt gekeken. Toch, X?

Spreker 2

Ja, exact.

Spreker 1

Oké, dan denk ik dat dit mooi aansluit bij het volgende puntje. Jullie zullen ongetwijfeld ook wel eens reacties krijgen of dingen tegenkomen waar foutieve informatie in staat, bijvoorbeeld door de burger verspreidt of door anderen. Hoe gaan jullie daarmee om gaan?

Spreker 2

Oké, nou ik moet zeggen dat komen wij niet vaak voor. Ook niet in warme fases. Kan me ook niet echt voor de geest halen dat ook een heel duidelijk geval hebben gehad van fake news. Dus ja, ons overkomt het niet vaak. Ook niet in het kader van het hoogwater van juli. Wat je af en toe wel tegenkomt is, ja, een andere kijk op zaken.

Spreker 1

Ik geloof dat X even wegvalt bij mij.

Spreker 3

Ik dacht dat het aan mij lag? Maar dat is dus niet zo.

Spreker 1

Hij is ook, zie ik.

Spreker 3

Het valt mee. Soms komt er een hele rare pose uit.

Spreker 1

Ik dacht dat het aan mijn wifi lag, maar.

Spreker 3

Nee ja, ik dacht dat ook even. Maar ik had zelf al een hotspot aangemaakt.

Spreker 1

Ja zal je altijd blijven houden met online vergaderingen, denk ik.

Spreker 3

Ik zie hier momenteel ook een storing bij. Op 1 Lijn en kunnen we niet inloggen. Dat, dat krijg ik net, maar Teams werkt daar volgens mij buiten.

Spreker 2

Volgens mij kunnen jullie mij weer verstaan.

Spreker 3

Ja, ik hoor je wel, je staat nog wel steeds stil, maar dat overleven we wel.

Spreker 2

Ja, jullie doen een beetje als een tekenfilm uit 1870.

Spreker 3

Ja, sorry, Ik ben blij dat je niet opneemt.

Spreker 2

Waar waren, nepnieuws?

Spreker 1

Ja, daar waren we.

Spreker 2

Ja, nou ja, goed, dat komen we niet vaak tegen. We komen af en toe wel dat je zeg maar een verschil van mening hebt. Nou ja, in het In het maaiseizoen. Dat is dus in de koude fase, zeg maar. Is er weer van alles? Zo ja, wat was het? In de koude fase.

Spreker 3

Wij zitten beiden volgens mij op kantoor en dit is zo'n ding dong bel die nooit komt, behalve wanneer er of iets ernstigs is of wanneer er een algemene oproep is. Dat gebeurt 1x in de drie maanden ofzo. En dan gaat belletje aan maar 5 keer achter elkaar zonder tekst.

Spreker 2

Nou ja bijvoorbeeld bij als wij slootkanten maaien. Als je de dieren diversiteiten toegedaan bent. Dan worden er berichten verspreid waarbij ja: "waterschappen rivierenland maait de boel kapot". Ja dat vinden wij een beetje ja, niet helemaal de waarheid. Dat ligt wat ons betreft wat genuanceerder.

Spreker 1

Ja, dat is natuurlijk geen fake nieuws inderdaad. Is X weggevallen, of is hij er nog?

Spreker 3

Geen idee, maar zie je bij andere partijen wel dat dat er echt fake nieuws bij komt?

Spreker 1

Op zich niet. Nee X, van de Veiligheidsregio Zuid Limburg. Dat is dus de eerste die ik gesproken heb die.

Spreker 3

We hebben een storing, dus niemand kan inloggen schijnbaar. Super interessant, maar goed. X is nog steeds bij ons denk ik, of niet X?

Spreker 2

Ik ben er, volgens mij kunnen jullie me wel horen of niet? Ik zie jullie niet.

Spreker 1

Ja nu wel weer.

Spreker 2

Nou ja, nepnieuws. Komen we niet vaak tegen. Weleens verschillen van mening waar mogelijk gaan we in discussie en dat proberen we zo open mogelijk te doen.

Spreker 1

Ja, duidelijk verhaal. Dat lijkt me ook het beste. Om even op jouw vraag terug te komen X, X van de Veiligheidsregio Zuid Limburg. Die zei of dacht dat er ongetwijfeld fake nieuws was, maar had het nog nooit bewust echt meegemaakt? En volgens hem had het niet in ieder geval geen aanzienlijke invloed op hun organisatie als het ware.

Spreker 2

OK.

Spreker 1

En had het inderdaad ook over meningsverschillen en dat soort soortgelijke berichten.

Spreker 2

Ja verschillen van inzicht? Nou ja. Niet exact onzin, maar.

Spreker 1

Nou de volgende vraag hebben eigenlijk allemaal met ja met fake nieuws te maken, of jullie er eerder mee te maken hebben gehad? Maar dat antwoord is dus nee, alleen beetje meningsverschillen. Een andere vraag is nog of er een plan binnen jullie organisatie om daarop te reageren of gaat dat een beetje hetzelfde als met normale vragen of meningsverschillen?

Spreker 2

Ik denk dat tweede. Op zich heb vind ik dat wel een hele goed tip eigenlijk. Van wat te doen bij fake news. Ik kan me voorstellen dat we dat in eerste instantie behandelen als een meningsverschil. Maar goed echt, ja een soort van desinformatiecampagne ik vind het interessant om daar eens over na te denken. Dat hebben we voorheen niet gedaan. We hebben wel een protocol voor trollen. Aangaande trollen, dat wel. Dat is een wat ouder protocol.

Spreker 1

En, waar bestaat dat uit?

Spreker 2

Nou hebben we niet echt te maken met hele erge trollen. Wel eens met mensen die ons een beetje op de huid zitten. Nou ja, meestal proberen daar meestal een goede draai aan te geven.

Spreker 1

Is dat vaak dezelfde hoek waar die mensen uitkomen, of verschilt dat heel erg.

Spreker 2

Nou ja, nee. De trollen die nu in de belangstelling staan daar hebben we eigenlijk niet veel last van. Dus ja wij hebben wel eens last met mensen uit de natuurbescherming hoek. Die zitten ons met name weleens kritisch achterna. Maar dat is helemaal niet erg, dat is eigenlijk ja, wij vinden dat eigenlijk wel goed. Over het algemeen proberen we altijd een beetje door de toon heen te kijken naar de vraag achter de vraag en dan gaan we daarop in en meestal werkt dat heel goed.

Spreker 1

Oké en die trollen is dat dan vaak via sociale media of gaat via andere kanalen.

Spreker 5

Dat is met name Facebook en Twitter.

Spreker 1

Ja oke.

Spreker 2

En dan trollen in een hele brede zin hoor. En ja ook dat, we hebben nooit echte hele erge problemen mee gehad. We hebben ooit wel eens een keer iemand die het echt niet met ons eens was en alles wat we posten werd er vanuit dat geval gereageerd. Maar als dat zo een tijdje doorgaat dan nodigen we die persoon uit voor een gesprek. In sommige gevallen worden dat zelfs je fans zeg maar.

Spreker 1

Dus altijd proberen om er dan positieve draai aan te geven als het ware?

Spreker 5

Exact, exact.

Spreker 1

Ik had nog een vraag, die ben ik heel even kwijt nu. Maar dan kom ik zo vast wel weer op. Even kijken. Merk jij ook dat bijvoorbeeld als zo'n trol vaak reageert dat andere mensen daar ook in meegaan of daarop reageren, of valt dat in het algemeen wel mee?

Spreker 5

Ja, het gebeurt wel eens maar op onderwerpen die heel zijdelings met ons werk te maken hebben.

Spreker 2

Als het ons puur aangaat, dan zijn de threads, als ik het zo mag noemen. Niet bijster lang. Het kunnen wel overigens personen zijn met een groot netwerk of een groot bereik? Om, dan heb je iemand vaak over mensen die werkzaam zijn in de natuurbescherming of de biodiversiteit. Dus je mag veronderstellen dat er dan wel veel meelezers zijn. Maar waar, waar ik de meeste activiteit in zie is dat ze, nou ja goed hé. Dan is het bijvoorbeeld. Dan gaat het over belasting en dan wordt de waterschapsbelasting daarin meegenomen voor een paar entries en gaat het vervolgens weer een hele andere kant op. Dat zijn echt, nou ja, dan heb je de threads van een paar 100 Mensen die op elkaar reageren. Maar voor waterschap gerelateerde onderwerpen is dat echt vrij zeldzaam. 30 man vind ik al huge.

Spreker 1

Dus in geval van die langere threads dwaalt altijd helemaal af, of vaak af.

Spreker 2

Ja of dan gaat het om een ander onderwerp waar wij als organisatie gewoon ja niet aangewezen zijn om daar wat van te vinden.

Spreker 1

Oké lijkt me, lijkt me een vrij duidelijk. Dan heb ik eigenlijk nog een laatste vraag, al denk ik. Jullie zeiden al, we hebben niet echt met fake nieuws te maken of in elk geval niet bewust dus, maar vooral wel met meningsverschillen. Nemen jullie het ook mee als jullie beslissingen nemen in wat je post en in het crisismanagement in het algemeen of crisiscommunicatie? Dat er meningsverschillen kunnen ontstaan?

Spreker 2

In de hete fase?

Spreker 2

Nou ja, goed, we brengen natuurlijk In de hete fase, dan gaat de omgevingsanalyse lopen hé, dus dan brengen we in kaart wat zijn de vragen van de mensen, wat is het vertoonde gedrag en wat voelen mensen daarbij. Als daarin meningsverschillen ontstaan, dan, ja, daar probeer je denk ik natuurlijk wel zo goed mogelijk rekening mee te houden. Het kan niet zo zijn dat je dat negeert en wij proberen ons verhaal daartegenaan te leggen. Of in ieder geval goed uit leggen. Waarom wij het zo aanpakken en, ja, wij zullen de instructies wel blijven uitvaardige van ja in deze fase is het goed dat je dit en doet en wel hier en hierom. Ja, bij een meningsverschil meestal komt daar wel een bepaalde argumentatie of emotie bij kijken. Meestal proberen we dan wel te duiden en daarbij aan te sluiten.

Spreker 1

Dus het startpunt is altijd de omgevingsanalyse en als daaruit blijkt dat mensen wat anders vinden, of dat ze met vragen zitten, dan wordt het wel meegenomen?

Spreker 2

Juist ja dat, dat is eigenlijk de crux van crisis communicatie denk ik.

Spreker 1

Oké. Dat somt het mooi op denk ik.

Spreker 3

Nou heb ik nog een vraag voor jou, want als dat de laatste vraag was, als je klaar bent met je onderzoek zouden wij die dan mogen ontvangen?

Spreker 1

Jazeker. Dat doe ik graag. En dan zijn we er denk ik. Dan wil ik jullie graag bedanken voor jullie tijd en dat jullie zo open mee wilde mee wilden doen.

Spreker 2 & 3

Graag gedaan.

Spreker 1

En dan zorg ik dat het zodra het af is, het jullie kant op komt, moet ik dat naar, naar wie zal ik dat mailen als het zover is?

Spreker 3

Naar allebei.

Spreker 1

Oké, komt goed.

Spreker 2

Dankjewel en succes met je onderzoek.

Spreker 1

Ja dankjewel jullie ook bedankt.

Spreker 2

OK.

Spreker 1

Tot ziens.

TRANSCRIPT SAFETY REGION SOUTH-LIMBURG

Spreker 1

Zullen we gewoon maar beginnen dan?

Spreker 2

Zeker er staat zelfs bij opname en transcriptie betekent dat hij dan meteen tekst maakt ofzo.

Spreker 1

Zou heel fijn zijn, denk het niet, Maar het zou een hoop werk schelen.

Spreker 1

Nou ja, hij neemt in ieder geval op, dus Dat is mooi. Ik heb de het interview een beetje verdeeld in in 3 blokken als het ware met het eerste blok meer algemeen over wat jouw functie is en hoe langer je al werkt en of je ervaring hebt met eerdere overstromingen of crisissen. Het tweede blok gaat over crisismanagement en crisiscommunicatie. Of in het algemeen wat voor plannen je daarvoor gebruikt. En het laatste deel gaat dan over het gebruik van social media en het dan wel of niet aanwezig zijn van fake news op sociale media. Dus ik denk dat het handig is dat we maar gewoon beginnen met een algemene introductie.

Spreker 2

Ja mijn naam is X. Ik werk zoals wij noemen als specialist risico en crisiscommunicatie bij de veiligheidsregio. Dat betekent eigenlijk dat je als er als er geen crisis is dat jij je bezighoudt met risicocommunicatie, dus welke risico's zijn er in Zuid-Limburg en om dat uit te leggen richting inwoners, instellingen en bezoekers om zo aan te geven wat de risico's zijn, wat mensen zelf kunnen doen om het risico te beperken en wat de overheid daaraan doet. En, Dat is eigenlijk wat risicocommunicatie grotendeels is en het is belangrijk dat we met risicocommunicatie Mensen voorbereiden op het moment dat er een crisis is, zodat ze dan ook weten wat ze moeten doen. En Dat is dus eigenlijk ja, crisiscommunicatie, gewoon een communicatie op het moment dat er een incident plaatsvindt. En, wij bereiden dat eigenlijk voor, dus wij bereiden voor dat er een website is waar tijdens de crisis gebruik gemaakt van kan worden maken, dat we NL alerts kunnen versturen dat er mensen geïnformeerd zijn om dat te doen. We weten hoe dat moet dat er plannen zijn, zodat ja dat we. Niet tijdens een. Crisis hoeven uitvinden van hé, wat zouden we nu eens gaan communiceren? Maar dat we wat We kunnen voorbereiden dat we dat voorbereid hebben. Dus daar komt het grotendeels op neer. Dat betekent dus

niet dat ik zonder meer tijdens de crisis altijd degene ben die communiceert, maar vaak is dat wel zo. Althans, Wij hebben dan piketten. En, dat betekent dat wij hebben 7 mensen iedere week die die piket draaien, dus dat doen ze één keer in De 7 weken. En dan ja dan houden zij zich bezig met de crisiscommunicatie. Mocht er zich iets voordoen. Ik ben zelf ook een van die piket functionarissen en Ik ben hoofd crisiscommunicatie. Dat betekent dat als er een crisis is dat ik zoveel mogelijk het team dat wij dan hebben voor communicatie het proberen te coördineren. Dat betekent, We hebben bijvoorbeeld een pers iemand die de pers te woord staat. We hebben iemand die op de social media accounts, kijkt wat er zoal gezegd wordt, hè? Dus bijvoorbeeld ook te kijken of er nieuws circuleert wat wij waarvan wij niet weten of dat er bijvoorbeeld vragen zijn waarop wij antwoord kunnen geven. Nou, daar is ook een redacteur die die zich bezighoudt met het verzenden van berichten via social media en de website. Er is iemand die het team dat hier zit met de bestuurder erin tijdens een crisis van communicatieadvies voorziet, dus er zijn eigenlijk allemaal verschillende functionarissen aan het werk op dat moment. mijn taak ook tijdens hoogwater was dan om dat zoveel mogelijk te coördineren. Ja, Dat is een beetje In het kort, nou ja in het kort nou niet eel kort, maar wat wat ik zoal doe aan en wat mijn taak is. We hebben een koude taak zoals we dat noemen, dus om en een warme taak, en dat is dan tijdens de crisis.

Spreker 1

Oké, duidelijk verhaal. Doe je dat al lang bij de veiligheidsregio?

Spreker 2

Ik 4,5 jaar ik over twee weken ga ik naar een ander naar een andere werkgever, Maar ik doe het nu 4,5 jaar. En ja, het waren wel 4,5 jaren met veel crises, dus Dat is eigenlijk ongekend wat we de afgelopen jaren hebben meegemaakt. Qua crisis en rampen et cetera dus.

Spreker 1

Ja, dat sluit mooi aan bij de bij de volgende vraag, want Dat was of je al eerder hebt gewerkt met zo'n gelijke crisissen. Maar ja, dus. Wat was jouw rol precies tijdens het hoogwater van vorig jaar?

Spreker 2

Nou, Ik had in principe geen geen piket hè, dus dus in principe hoefde ik niet. Hoefde ik niet te werken. Maar ja, als als er zo'n grote ramp is, dan wil je niet zomaar een beetje toekijken, dus ik ben gewoon ook naar kantoor gegaan en heb ja eigenlijk een beetje alle rollen vervuld, dus Ik heb de pers te woord gestaan. Ik heb website berichten gemaakt, Ik heb boel een beetje gecoördineerd, dus Omdat het eigenlijk een crisis was die 7 dagen ongeveer doorging 24 7 ja kun je natuurlijk niet van een iemand vragen om 24 7 lang een bepaalde rol in te vullen, dus dat hebben we afgewisseld meestal en daardoor ja heb ik eigenlijk alle verschillende rollen een beetje ingevuld. Dus ja, het was niet een rol, maar gewoon. Ja van alles.

Spreker 1

Oké goed. Ja, Dat was een beetje de achtergrondinformatie, zodat ik weet wie je bent en wat je doet en wat voor ervaring je er al mee hebt. Dus dan komen we automatisch bij de bij het volgende puntje. Dat is dan het crisismanagement zelf. Nou, je zei al, jullie hebben wel wat standaard plannen en zo gebruik je die ook altijd of heb je daar afwisseling in? Of verschilt dat per crisis?

Spreker 2

Ja wat wij hebben is ja, wij als veiligheidsregio's zijn we verplicht om brand bestrijdings plannen op te stellen. Maar we zijn niet verplicht om die voor alle risico's op te stellen. Nou in Zuid-Limburg is het zo dat wij vier rampbestrijdingsplan hebben een rampbestrijdingsplan gaat over Chemelot. Dat is 1 grote

chemische industrie, complex of regio. Dan hebben we een 1 rampbestrijdingsplan voor een vliegveld. Dat is voor elke veiligheidsregio verplicht om een op bestrijdingsplan te hebben voor een vliegveld. Dus dat hebben we ook omdat we één vliegveld hebben. We hebben een rampbestrijdingsplan voor Awex. Dat is een defensie, ja, Amerikaanse defensiebasis net over onze grens, dus net in Duitsland, maar wij vinden het toch wel verstandig om daar een rampbestrijdingsplan voor te hebben. Omdat ja, dat vliegveld, Dat is echt net iets van paar 100 m of zo buiten onze grenzen. Daar hebben we dus ook een rampbestrijdingsplan voor en het laatste hebben we een plan voor hoogwater van de Maas. Want nou ja, voor voor vorig jaar hebben we eigenlijk nooit op zo'n grote schaal last gehad van overstroming van de beken en de zijrivieren, maar vorig jaar was dat dus wel zo en ons plan was dus ook vooral toegerust op hoogwater van de Maas, omdat dat in 1993 en 1995 flink mis is gegaan. Ja, sindsdien zijn er heel veel verbeterlagen doorgevoerd, dus was de kans gewoon nog een stuk kleiner dat het zou gebeuren? En, daar is altijd het plan op toe gericht geweest en nooit op de op de beken en zijrivieren. Dus ja, dat is ook waar wij vorig jaar mee aan de slag zijn gegaan met het rampbestrijdingsplan hoogwater Maas, wat dus die is bij elke kubieke afvoer kubieke water afvoer kubieke meter water afvoer aangeeft. Van ja, wat zijn de taken werkzaamheden? Wat moet je doen? Er staat dan precies zo ja per waterafvoer staat er precies bij wat je kan verwachten en wat je moet doen, welke organisatie dat moet doen. Maar dat plan bleek wel. Ja, bleek dus toereikend te zijn voor het hoogwater van de Maas. Heel goed zelfs, maar niet voor het hoogwater van De Geul. Daar hadden we dus geen plannen voor. De vraag is ook of daar, als we daar plannen voor hadden gehad of dat dan of dat dan in de bestrijding veel veel efficiënter of beter was gegaan. Waarschijnlijk een beetje, maar alsnog. Ja, dat water was alsnog gaan stijgen en het had alsnog ja, het water kunnen we niet tegenhouden. Maar wel hoe we, hé daar andere organisaties weer voor het zoals Waterschap Rijkswaterstaat die daarvoor zorgen, wij. Ja houd ons gewoon bezig met: wat als het water stijgt, wat kunnen wij dan als hulpdiensten doen om om de de situatie zo snel mogelijk naar normaal te brengen en in ieder geval Mensen te helpen? Ja en daar dat, dat is nu dus dat plan. Dat is nu dus uitgebreid. Dat is nu een nieuwe versie van onlangs. Dat ligt nu ter inzage, dus daar is nu een nieuwe versie van dat plan. En dat heet ook hoogwater Limburg, dus dat plan, dat is niet alleen maar toegesneden op de Maas, maar ook op de beken en zij rivieren, zodat het ook meer daarvoor gebruikt kan worden. Dus ja, dat dat is dus wel goed om te noemen. Dat is dus echt een multidisciplinair plan, dus Dat is echt voor alle hulpdiensten en Dat is niet per se voor communicatie. Daar staan ook passages in van communicatie. Zo staat ook in van nou bij zoveel water afvoeren. Bij de Maas moet je dit en dit en dit doen. Maar dat staat daar niet precies bij. Oké, en welke boodschap moet je dan? Of dat sowieso specifiek gaat het daar niet op.

Spreker 1

Nee, Het is echt echt een breed plan voor allerlei kanten van de ramp zeg maar.

Spreker 3

Ja precies ja.

Spreker 1

Oké duidelijk. Nou, je noemde net al dat voorbeeld van het vliegveld, wat dan net over de grens ligt. Ik neem aan dat jullie daar bijvoorbeeld wel samenwerken met Duitsland of met of met andere omliggende landen of met België. Is dat met hoogwater ook zo dat je met die landen samenwerkt?

Spreker 2

Ja, dat is dus bij ons zo geregeld. In Zuid-Limburg hebben wij bureau EMRIC. Dat is EMRIC en dat is eigenlijk Euregio Maas Rijn Incident Bestrijding en Crisisbeheersing volgens mij, Ik weet het even niet zeker, maar in ieder geval daar legt het zich ook toe op de samenwerking omtrent de incidentbestrijding in de EU. Dus België, Duitsland en Nederland, want ja, hier heb je gewoon bepaalde stukken waar de brandweer van Duitsland sneller is dan de Nederlandse brandweer en daar, daar zijn gewoon afspraken gemaakt dat de Duitse brandweer dan ook gewoon komt helpen en wie er het eerst is die begint met die

incidentbestrijding, dus ja, Als je ergens in Landgraaf woont, bijvoorbeeld dicht tegen de Duitse grens aan zou best kunnen dat de Duitse brandweer er eerder is en dan begint met blussen. En zo gaat het eigenlijk voor heel veel van onze risico's en. De bestrijding daarvan, we helpen elkaar gewoon. Dat gaat ook met de ambulance als iemand sneller in het In het ziekenhuis van van Aken kan geholpen kan worden acuut, dan wordt hij daar ingebracht, dus dat wordt dan gecoördineerd vanuit de meldkamer en en daar zijn. Ja Er zijn afspraken voor, dus dan moet je natuurlijk allemaal wettelijk regelen, omdat dat ja anders, dan kun je dat niet zomaar doen, Maar dat gaat allemaal via EMRIC.

Spreker 1

En geldt het dan ook voor de rivieren die je zeg maar als het ware deelt, is daar ook een gedeeld plan voor of is dat meer op een spontane basis?

Spreker 2

Ja, dat is dan meer operationeel, want ik denk dat daar wel als je dan op incidentbestrijding gebied echt inhoudelijk gaat kijken, hè? Dus dus een brand dat is in principe redelijk simpel, hè? Ja, een brand is niet anders als die in Duitsland is of in Nederland is. Maar als je gaat kijken inhoudelijk en dan gaat het veel meer over beleidsbeslissingen. Ja, kijk of je evacueert langs de Maas dat kunnen de Nederlandse beleidsbepalers bepalen natuurlijk. Of de bestuurders kunnen daar een keuze in maken, maar die hoeft niet hetzelfde te zijn als wat de Belgen doen, want die ja, die hebben gewoon hun eigen bevoegdheden daartoe, en daar zijn eigenlijk geen afspraken voor omdat het gewoon verschillende organisaties zijn. En, dat kan natuurlijk wel heel lastig zijn en dat hebben we ook met corona bijvoorbeeld gezien. Ja, dat je dus ziet van ja, mensen gaan hier vaak. Omdat ze heel dicht tegen de Duitse grens wonen. Willen ze boodschappen gaan doen in Duitsland. En ja, dan werd er door Duitsland gezegd, ja, nee, maar jullie moeten niet hierheen komen, terwijl ja feitelijk is dat wat mensen altijd hebben gedaan. En nu wordt er opeens een harde grens bepaalt. Van nee, jullie mogen niet meer hierheen komen. Want dan ja komt die infectieziekte er gaan jullie het overdragen. Et cetera, ja, qua beleid is dat ook niet uit te leggen vind ik zelf.

Spreker 1

Ja, dat is lastig.

Spreker 2

Dus ja, dat slaat nergens op. Ik bedoel dat, dat gaat er gewoon om dat je het contact zoveel mogelijk beperkt en dus dat je daardoor voorzichtig doet, maar het heeft geen nut. Om dan te verbieden dat ze naar Duitsland gaan, zeg maar. Maar dat is mijn persoonlijke mening en ik denk dat die ook wel gedeeld wordt door mensen hier in de omgeving. Het is heel lastig omdat uit te leggen voor communicatie in mijn geval, om dat sluitend te maken.

Spreker 1

Maar er is dus niet echt een gedeel beleidsplan wat betreft de rivier met Duitsland of België.

Spreker 2

Nee, nee, zeker niet. Nee, dat klopt.

Spreker 2

Nee, want het bestrijdingsplan maken de beide veiligheidsregio's samen, dus de Veiligheidsregio Limburg Noord en Zuid-Limburg.

Spreker 1

Maar mocht het dus zover zijn dat er inderdaad een ramp komt, dan zullen ze wel te hulp schieten: de Belgen en de Duitsers?

Spreker 2

Ja ja dus dus, dus het verschil denk ik het operationeel. Was ja helpen, het helpen we elkaar en dat was dan wel tijdens het hoogwater van vorig jaar heel lastig Natuurlijk, want de Belgen hadden zo niet grotere problemen dan dat, want wij hadden dus dat daar viel dat wel mee. Men hield mekaar wel op de hoogte. Dat wel. Dus er was bijvoorbeeld wat met een sluis. In België die dan al dan niet opengezet werd en daar was dan wel wat wat minimaal contact over hoe dat nou precies zat, maar dat zijn dan allemaal operationele dingen, zeg maar, dus dat staat niet ergens van. Ja dat dat zonder meer gebeurt.

Spreker 1

Er is geen standaard plan voor?

Spreker 2

Nee nee, nee het. Is gewoon hier een afspraak die die de meldkamers bijvoorbeeld hebben. De meldkamer in Luik en de meldkamer hier in Maastricht is dat als er een incident is. Dat hadden we hadden bijvoorbeeld vorig, nee, dat was ja, vorige week een brand in Lanaken net over de grens in België. Daar kwam heel veel rook bij vrij en die rook trok dus ook over heel Zuid, Limburg en dan ja, dan is het natuurlijk in Lanaken, in België is dat incident, dus de Belgen gaan houden zich bezig met de bestrijding van dat incident en vervolgens seinen zij de Nederlandse hulpdiensten in van joh die. Er is een incident gaande, wij zijn het aan het bestrijden in België, maar die rook, die trekt wel over jullie gebied en dat is jullie bevoegdheid, dus wij moeten dan als Nederlandse hulpdienst bepalen van ja, wat willen wij dan mee willen? Wij willen wij mensen binnenhouden of willen we zeggen de ramen en deuren sluiten. Maar daar ja die bevoegdheden. Die zijn dus gewoon apart, Maar het is wel zo verstandig om dat enigszins met elkaar in lijn te brengen. Want als in België Iedereen gemaand wordt om binnen te blijven en het is allemaal heel gevaarlijk en wij zeggen, joh, het is niet gevaarlijk. Ja dan ja dan krijg je natuurlijk wel een discrepantie en dat is niet heel geloofwaardig in die zin dus. Dus je moet het afstemmen, maar het blijft een eigenstandige bevoegdheid.

Spreker 1

Ja oké lijkt me een vrij duidelijk verhaal. Even kijken, wat heb ik dan als volgende? Die heb ik al gehad. Hoe wordt de communicatie tijdens het hoogwater dan bijvoorbeeld gecoördineerd tussen betrokken personen. Is daar een standaard plan voor of hoe gaat dat. Worden mensen opgeroepen of hoe gaat het in zijn gang?

Spreker 2

Ja bij het hoogwater zijn natuurlijk heel veel personen betrokken. De coördinatie wordt gevoerd door de veiligheidsregio, dus daarom is de veiligheidsregio ooit bedacht in die zin om die coördinatie te versnellen en te behouden. Dus mensen komen dan. Nou ja, in principe hebben we organisaties allemaal hun eigen standige verantwoordelijkheid, dus de politie werkt aan de dingen waar ze normaal ook aan werken. Het waterschap werkt aan de zaken het ten aanzien van beek en zijrivieren om die zo goed mogelijk te laten doorstromen, zodat de problemen niet erger worden. Rijkswaterstaat doet hetzelfde voor de Maas en doet hetzelfde voor de wegen. De veiligheidsregio is eigenlijk de organisatie waarin al die partners samen komen om ook te kijken van ja, maar ja, als jij dit doet dan zorgt dat misschien voor de politie voor veel meer werk, of voor een bepaald ander soort werk. Daarom is het goed als je dat met elkaar afstemt. Daarnaast is de veiligheidsregio de instantie die beleidsbeslissingen neemt. Hè? Het bestuurders moeten uiteindelijk gaan bestuurders erover of een bepaald gebied geëvacueerd wordt, of

niet. Nou als een bepaald gebied geëvacueerd wordt, dan heeft dat natuurlijk impact voor de brandweer, voor de politie, voor de ambulancediensten, dus dan dat wordt dat wordt gedaan binnen de binnen de veiligheidsregio. En ja binnen de veiligheidsregio zitten die Mensen allemaal bij elkaar in crisisteam en dan schuift er bijvoorbeeld vanuit communicatie schuift er een iemand aan bij dat crisisteam. En ja, die koppelt daar terug wat communicatie zou adviseren qua aanpak, hè? Van nou, vanuit communicatie is er vooral hier vraag naar en dit zouden we moeten we oppakken of dit vooral wel of dit vooral niet doen. En er wordt een keuze gemaakt binnen dat crisisteam en vervolgens gaat dat mannetje of vrouwtje van communicatie terug naar het communicatieteam en zij gaan zich dan met de uitvoering bezighouden van oké, we moeten alert versturen. We moeten een website bericht maken, et cetera. Elk onderdeel is dan ook weer wij als communicatie zijnde dan verantwoordelijk om met de communicatieadviseur van het waterschap, van Rijkswaterstaat van ja andere partijen die mogelijk betrokken zijn. Defensie was vorig jaar betrokken. Om daarmee af te stemmen, zodat we in ieder geval een eenduidige boodschap naar buiten brengen, zodat voor inwoners wel nog begrijpelijk blijft wat er gebeurt. Maar wij komen niet samen in een crisisteam van communicatie, dat gebeurt eigenlijk vooral vanuit de coördinatie van de crisis zelf, dus niet voor communicatie hebben we. Dat niet. Maar wel. Ja dat dat gebeurt dus wel voor de coördinatie van de ramp zelf. Als je begrijpt wat ik bedoel.

Spreker 1

Ja dus vanuit jullie zeg maar, vanuit de communicatie zal er altijd iemand aanschuiven in het crisisteam.

Spreker 2

In het grote crisisteam. Ja, ja.

Spreker 1

Dat ze is dat ook duidelijk, dan komen we meer op de op het sociale media stuk van het interview. Nou, je zei al jullie gebruiken inderdaad wel sociale media. Welke platforms gebruiken jullie daarvoor?

Spreker 2

Wij gebruiken nou ja, website, dat is niet echt een social media, maar dat dus in ieder geval één van de media die we gebruiken. Wij gebruiken vooral Twitter eigenlijk. En, dat doen we eigenlijk voor alle incidenten, dus als er een incident is, als er een brand is in een gebouw in Maastricht bijvoorbeeld waar ik nu zit daar ja, dan communiceren we daar sowieso over via Twitter. Is het iets groter wordt of als de impact wat groter wordt van bepaalde zaken, dan doen wij dat via Twitter en via Facebook. En als het nog iets groter wordt, zetten we ook een bericht erover op onze website dus bij hoogwater communiceerden we via al die kanalen: website, Facebook, Twitter. En daar hebben we nog onze ja eigenlijk onze eigenstandige kanalen zoals de sirenes en NL Alert mocht er echt een acute noodsituaties zijn waar mensen moeten optreden, dan doen we dat via die kanalen.

Spreker 1

Dus de standaard to go to is zeg maar Twitter en als mocht het groeien, dan volgt de rest. Zo met als met als uiterste de sirenes en NL Alert.

Spreker 2

Ja precies. Ja klopt, en moet ik zeggen dat is ook wel aan verandering onderhevig, dus ik verwacht dat wij dat niet altijd, want je ziet wel dat Twitter is natuurlijk wel een bron waar niet heel veel mensen op zitten. Dus nou, dan merk je ook wel dat dat niet iedereen dat. Ja de inwoners denken ook wel eens van ja Twitter, maar ik heb dat niet of ik kijk daar niet op. Of en, en ja, daar zijn wij het in die zin ook wel mee eens. Wij zoeken wel nog even naar wat ook kan binnen de binnen de grenzen van wat er moeten wel mensen zijn die daar ook over communiceren en die moeten ja ook die die die verschillende media

zo goed mogelijk kunnen van informatie kunnen voorzien. Dus daar moeten we nog naar kijken hoe we dat steeds kunnen verbeteren, Maar dat is op. Dit moment wel hoe het is

Spreker 1

Oke mooi. Twitter is natuurlijk wel mooi platform waar je ook discussies kan voeren. Doen jullie dat ook als mensen vragen stellen, bijvoorbeeld dat jullie die dat platform gebruiken om die te beantwoorden?

Spreker 2

Dat doen we niet Omdat we daar eigenlijk simpelweg geen tijd voor hebben. En dat klinkt heel raar. Maar wij proberen wat wij doen met onze omgevingsanalyse, dus we hebben een omgevingsanalist en die kijkt eigenlijk wat voor vragen er zijn op Twitter of wat voor vragen er zijn op Facebook. En die vragen die ja, die zet hij in een lijstje en maakt hij een analyse van dan zegt hij van nou, oké, op deze en deze vragen moeten wij antwoord gaan verzinnen, want dit zijn vragen vanuit de maatschappij en dat proberen we dan een Q en a voor te maken, zodat wij in een nieuw bericht dat we dan op Facebook zetten proberen die vragen te beantwoorden, zodat als die een weer een nieuwe analyse gaat maken, dat die niet weer stuit op dezelfde vragen. Want dan ja, of dan maken we gebruik van de verkeerde kanalen, of dan hebben we nog niet helder genoeg uitgelegd of die vragen niet goed genoeg beantwoord. Dus we doen het meer schrapen bij elkaar en dan, ja, maken we er chocola van en dan sturen we dat terug. Maar we gaan niet op elke vraag individueel antwoord geven.

Spreker 1

Nee, dat lijkt me, lijkt me ook logisch, maar jullie nemen dus in elk geval wel mee als discussiepunt wat er gevraagd wordt?

Spreker 2

Ja, ja, Dat is sterker nog. Dat is gewoon een belangrijkste voor ons. De belangrijkste vorm onderdelen van de analyse om te kijken wat de vragen zijn? Aan de hand daarvan bepalen we grotendeels wat de communicatie moet zijn.

Spreker 1

Oké goed. Wat voor soort berichten plaatsen jullie op? Op Twitter zijn dat meer berichten die laten weten wat er aan de hand is of gaat het ook meer in de diepte over wat ze moeten doen. Bijvoorbeeld een waarschuwing of instructies?

Spreker 2

Ja alles eigenlijk, ja, kijk, kijk, als mensen moeten evacueren, dan zetten we dat ook op Twitter. Maar dan sturen we natuurlijk wel een NL Alert uit of zo. Dan gaan we er niet vanuit dat mensen op Twitter kijken. Maar het begint eigenlijk met het melden van het incident, dus er is een brand op de deze straat in deze gemeente en vervolgens wordt dat uitgebreid met procesinformatie bijvoorbeeld. Er zijn een aantal brandweer voertuigen op weg om de brand te blussen op dit moment. De rook gaat daar naartoe et cetera en vervolgens kan het ook aangevuld worden met ons advies is, sluit je ramen en deuren zet je mechanische ventilatie uit. Dus dus het begint vaak met een aankondiging en vervolgens wat doen de hulpdiensten en vervolgens, wat kan je zelf doen om jezelf in veiligheid te brengen of anderen in veiligheid te brengen. Dus dat kan steeds een trapje dieper gaan eigenlijk.

Spreker 1

Dus op die manier wordt altijd de burger wel up to date gehouden, zeg maar van wat er aan de hand is?

Spreker 2

Ja in ieder geval getracht om die informatie beschikbaar te krijgen voor inwoners en daar zit er nu nog een beetje een kloof, denk ik tussen wat wij doen en ja, de kanalen die we daarvoor gebruiken en dat inwoners dat ook daadwerkelijk kan gaan zien. Dus dat daar zit nog een verbeterpunt, denk ik, Maar dat geldt, denk ik voor heel veel veiligheidsregio's

Spreker 1

Ja duidelijk nou mijn laatste vraag in dit vakje was dan: Waarom gebruikt uw organisatie, sociale media? Maar het lijkt me wel vrij duidelijk dat we dat nu al hebben beantwoord omdat mensen erop zitten en het is een makkelijk middel natuurlijk.

Spreker 2

Ja om op te halen dus eigenlijk en om te zenden, om in gesprek te gaan. Eigenlijk, dat is het dan.

Spreker 1

Tweezijdig eigenlijk ene kant, de mensen of de de burger informeren en up to date aan de andere kant zelf chocola van de situatie maken.

Spreker 2

Ja precies en mensen verwachten het ook, hè? Dus ze zeggen ook van ja Twitter daar kijken we niet op. Dus mensen verwachten ook dat je als organisatie met belangrijke informatie op social media zet.

Spreker 1

Wat zegt de burger nu dan? Welke kanalen gebruiken ze wel vaker dan?

Spreker 2

Ja je ziet er wel Facebook bericht als we daarop, ja dan wordt het vaker gelezen. Ja, je hebt Natuurlijk nu. Het ligt er ook maar aan welke doelgroep je wil bereiken dus je ziet natuurlijk TikTok of wat dan ook, Instagram zou je natuurlijk ook kunnen inzetten voor ja voor crisiscommunicatie Alleen ja, de vraag is altijd welke doelgroep zit daar dan weer op. En dat is natuurlijk constant de uitdaging. Van ja, eigenlijk zou je zou je een differentiatie moeten maken in in social media kanalen. Alleen dat kan gewoon in crisis. Vaak helemaal niet dus. En dat kon in corona tijd wel bijvoorbeeld iets meer dat je dus op enig moment hebben we, want we hadden geen Instagram kanaal voorheen. Dat hebben wij ook een corona tijd wel op enig moment gedaan, omdat we bijvoorbeeld zagen van ja, we bereiken eigenlijk die jongere doelgroep niet zo goed. Dat kan dan weer beter met Instagram. Dat is ook alweer altijd de vraag, want dan denk ik ja, wie gaat er, welke jongeren vinden het nou heel erg leuk om de veiligheidsregio te gaan volgen? Dat kun je ook afvragen, maar in ieder geval heb je dan een grotere kans dat je mensen bereikt dan via andere kanalen.

Spreker 1

Ja, dat ben ik wel met je eens denk ik, want als je mij zou moeten bereiken, ik heb zelf geen Twitter en geen Facebook, maar wel Instagram bijvoorbeeld. Dus dan ja. Denk dat ik anders ook wel mee zou krijgen, maar het is inderdaad wel een andere doelgroep om te bereiken.

Spreker 2

Precies en dan heb je ook natuurlijk bij Facebook als je vrienden het dan liken dan, dan zou je Misschien nog wel voorbij zien komen ook als je zelf het account van de veiligheidsregio niet volgt. Maar ja, op Instagram is dat dan natuurlijk weer anders, want als je het niet volgt, dan zie je het ook niet.

Spreker 1

Dan zie je het niet inderdaad.

Spreker 2

Dus ja dat dat Dat is wel. Ja is wel lastig, maar ja, Het is een constante zoektocht denk ik.

Spreker 1

Precies. Het is denk ik goed ik goed om in elk geval open te staan voor vernieuwing daarin.

Spreker 2

Zeker ja.

Spreker 1

Nou, dan komen we bij het laatste blok met vragen. Nou, sociale media gaat vaak Samen met fake nieuws en dan is dus de vraag, denk jij dat er over het hoogwater van vorig jaar fake nieuws was? Of, heb je dat meegemaakt?

Spreker 2

Ik denk het wel, weet je de, het zou naïef zijn om te om te denken dat er totaal geen fake nieuws de ronde heeft gedaan, maar Als we dan kijken naar de analyses die daar wat daarin terug is gekomen, dan hebben we niet gezien dat het dat fake news een enorm grote rol gespeeld heeft in de publieke opinie. Dus dat zou ik dat, dat durf ik wel te stellen. Maar dat dat fake news de ronde heeft gedaan. Ja, dat kan bijna niet anders, want we gaan altijd. Ja, het wordt nooit altijd precies uitgelegd op de manier waarop je het zelf Misschien uitlegt of bedoelt of wat anders geïnterpreteerd en dan kunnen dingen snel een eigen leven leiden. Ik weet dat er met die sluis was. Er was er wel het een en ander te doen op dat moment, Omdat men dacht van dat dat die sluis volgens mij open werd gezet en dat heel Limburg zou overstromen. Nou nat was niet echt sprake van dus. Volgens mij hebben wij daar toen wel, dus dat hebben we dus opgepakt en proberen uit te leggen van het precies zat, dus dat zou je wel een puntje van fake nieuws kunnen noemen. Maar dat, ja, dat, dat weet ik even niet meer hoe dat nou precies zat, maar dat dit is even op hoofdlijnen wat ik me daarvan herinner. Dat was ook direct een van de meest. Ja wat ik me daarvan herinner voor de rest viel dat eigenlijk wel heel erg mee.

Spreker 1

Oké dus, dus je zegt van, dat zal er ongetwijfeld zijn geweest, Maar het heeft niet een hele grote impact gehad of eigenlijk nauwelijks.

Spreker 2

Nee dus, dat is wat we hebben gezien. Dat is wat we natuurlijk continu monitoren via de social media. En Dat is wat we natuurlijk ook zien. En we zitten natuurlijk ook niet zo heel goed In de In de in de non digitale wereld. Als in wat er wat er tussen mensen op straat wordt gezegd. En wat er wordt gedeeld. Ja,

grote kans dat dat de helft daarvan ook niet precies klopt en niet volgens de feiten is en dat het eigen verhalen worden gemaakt. Et cetera, maar daar dat daar weten we. Niks van dus.

Spreker 1

Dat kun je ook niet bijhouden, dat is niet te doen.

Spreker 2

Precies, dus dat dat weet ik niet. Nee.

Spreker 1

Oké, heb je tijdens je carrière wel eens eerder te maken gehad met fake news? Dat je echt zeker wist dat het fake nieuws was, laat ik het zo stellen.

Spreker 2

Ja, moet ik even nadenken? Hoor dan weet ik even niet uit mijn. Hoofd niet ik. Niet, ik kom niet echt direct iets helemaal op, want ik denk van nou dat dat was toen echt stuitend of wat dan ook? Nee, ik kan me dat niet zo goed herinneren.

Spreker 1

Nee, Dat is ook prima. Als het er niet is, dan is het er niet, dus dat is ook prima.

Spreker 2

Ja ik zit nog even te denken. Dat was wel een voorbeeld van van een. Dat was zelfs een voorbeeld van een intern iets, want dan had in gemeente die had daar, die had zelf iets verzonnen. Die zei van, Oh, ja, bepaald plan geldt niet voor ons terwijl dat niet waar was, maar ik zit nu heel. Dat is even een. Ik heb het niet meer helemaal scherp waar het nou over ging, Maar dat was in ieder geval iets wat we toen moesten sussen. Van dat, dat klopt niet wat jullie zeggen moet even je moet dat even van Facebook halen. Maar dat was dan meer fake news vanuit ons vanuit de overheid zelf als het klopte gewoon, die was gewoon feitelijk onjuist die informatie.

Spreker 1

Maar dan was het meer een fout, een ongelukkige fout neem ik aan dan doelbewust verkeerde informatie ofzo?

Spreker 2

Precies Als je dan ja, oke, ja als je dat inderdaad als definitie neemt dat het inderdaad doelbewust verspreiden van foutieve informatie is, dan nee.

Spreker 1

Oké dan is dat in elk geval duidelijk. Hebben jullie binnen jullie organisatie een plan om om te gaan met fake nieuws? Of hangt dat af van de omgevingsanalist? Die beoordeelt dat?

Spreker 2

Ja ja ja precies die beoordeelt dus wat er gezegd en verteld wordt en vervolgens wordt er een aanpak op bedacht. En dan is het dan, dan is het wel duidelijk dat je aangeeft. We beetje het procesje is op zich wel

duidelijk, hè? Je neemt het. Je neemt het bericht dat citeer Je zeg, maar hè, daar gaat een bericht rond van. Dat is volgens mij ook een afkorting voor benoemen. Even kijken moet ik. Ik heb dat in mijn telefoon. Ik heb wel in mijn telefoon staan, Maar ik weet even niet waar mijn hoofd, maar in ieder geval, Er is een. 1 1 1 soort van proces. Procesje voor wat je zou kunnen doen. Ja omgaan met geruchten bijvoorbeeld de benoemen van het gerucht. Nou, dit is het gerucht, dus we snappen de aansluiten, zeggen we dan nou, we snappen. Dat dat voor onenigheid zorgt maar nou en dan meenemen van mensen. Maar nou op dit ogenblik is daar echter geen sprake van en op die manier eigenlijk de geruchten een beetje ontkrachten of het fake nieuws eigenlijk ontkrachten dus, dus helder bij de mensen die dat op zich op dat moment moeten doen? Maar het staat nergens concreet beschreven.

Spreker 1

De mensen die erop moeten anticiperen, die weten wel wat ze moeten doen. Er is. Wel, een soort van kleine strategie.

Spreker 2

Precies, het zit wel In de hoofden maar het het staat nergens vast dat je dat op die en die manier moet doen. Ja, dat zou je kunnen zeggen.

Spreker 1

Oké, dat lijkt me ook een duidelijk verhaal. Dat is ook misschien een beetje buiten jouw functie, maar houden jullie rekening met de aanwezigheid of de kans op fake nieuws wanneer er besluiten worden genomen binnen zo'n crisisteam?

Spreker 2

En, en wat bedoel je dan concreet? Als er als een beslissing wordt genomen dat er dan gedacht wordt van.

Spreker 1

Nou stel bijvoorbeeld dat je zegt over die Sluis en jullie weten al dat er wat geruchten of wat verkeerde informatie is. Wordt er dan doelbewust rekening mee gehouden met wat je naar buiten brengt?

Spreker 2

Nee, dat denk ik niet, want uiteindelijk staan die die beslissingen los van dat fake news, maar zo je wel heel of ja, ik denk dat je daar wel rekening mee houden natuurlijk hè? Als als dat fake news is en waardoor bepaalde ja, ik weet niet, het ligt eraan wat het fake nieuws behelst hè? Dus wat wat, wat gaat er rond n daar hou je daar wel rekening mee. Wat bepaalde beslissingen kunnen daar Natuurlijk nog extra olie op het vuur gooien of. Ik denk dat de beslissing an sich dat niet zal veranderen, maar je zal het dan wel heel goed moeten uitleggen of je zal. Wel extra communicatie moeten doen, of. Maar ik denk wel dat het dus dus de communicatie adviezen zou dat dan wel bijvoorbeeld inbrengen? Van joh weet wel, dit en dit speelt, het is niet waar. We hebben dat al probeert te ontkrachten, maar we moeten daar wel rekening mee houden. Misschien In de besluitvorming. Dat betekent niet dat je iets heel anders gaat beslissen, denk ik, maar wel dat je daar rekening mee houdt of of dat je met inzet van politie rekening houdt natuurlijk als als er een demonstratie gaat gaat zijn of of mensen worden opgeroepen om te gaan demonstreren of wat dan ook. Ik weet niet of dat dan een fake nieuws zou vallen, maar ja, daar houd je er wel rekening mee in je in je besluitvorming.

Spreker 1

Misschien ook meer onbewust dan bewust. Denk je?

Spreker 2

Ja, het is is niet dat je dat je constant in zo'n crisis team afgaat. Oh is er nog fake nieuws waar we rekening mee moeten houden, maar wel een communicatieadviseur die aangeeft van joh dit en dit merken wij nog In de maatschappij of deze vragen zijn of deze verhalen gaan de ronden en dan moeten we wel rekening mee houden, dus dat wel op die manier wel.

Spreker 1

Oké, nee, dan lijkt me dat duidelijk nog op het laatste paar korte vraagjes denk je dat fake news een effectieve crisiscommunicatie belemmert? Of meer specifiek dan, fake news op sociale media?

Spreker 2

Ja precies ja belemmert wil ik ja nou dat denk ik wel. Ik bedoel ja als er geen fake nieuws is, is dat altijd beter? Dus ja belemmert weet ik niet zozeer. Althans, ik denk dat je nog altijd heel goede effectieve crisiscommunicatie kunt doen, ook met fake news. Als je het maar gewoon op een goede manier tackelt. En daar goed mee omgaat en het wel benoemd, dus niet zomaar laat bestaan maar wel gewoon benoemd en aan aansluit. Bij schijnbaar de de de de gevoelens die er dan bij bij sommige. Zijn dus het ja verbetert het niet, laat ik het zo zeggen, Maar het hoeft niet per se de crisiscommunicatie te niet te doen dat eigenlijk.

Spreker 1

Dus het hoeft geen schade te hebben zolang je maar nou erkent dat het er is en het meeneemt in elk geval?

Spreker 2

Ja zolang je er maar heel goed om monitort en ermee om en er iets mee doet, zeg maar en soms kun je er ook. Je moet ook altijd de afweging maken, denk ik of je er iets mee wilt doen of niet. Kijk als er kan ook fake nieuws rondgaan, maar als je dan een twitteraar hebt met twee volgers en die fake nieuws verspreiden en vervolgens het krijgt, krijgt het geen aandacht van andere mensen. Ja, daar ga je natuurlijk niet benoemen, want dan richt je eigenlijk meer schade aan met het benoemen dan dat je het onbenoemd laat. Dus die afweging moet je natuurlijk wel ook altijd maken en dat doen we ook als. De analisten gaan niet? Een klein berichtje dat veel is daarna ervoor ging, krijgt benoemen, zeg maar, dus dat. Is belangrijk.

Spreker 1

Dus dus als ze dat inschatten, dan nemen ze ook altijd mee, zeg maar wie het verspreidt en en hoeverre het verspreid wordt en wie het te zien krijgt.

Spreker 2

Ja precies precies dus dan kijken ze wel van. Ja, heeft dat nou impact dat? Want anders want. Dus in die zin, Als ik dan nou terugkijk wat je net vroeg zeg, maar he was er fake news. Ik denk het wel, weet je dat op Twitter ook. Er wordt zoveel geroepen aan zoveel dat niet klopt. En als we dat dan als fake nieuws classificeren, dan zal dat ongetwijfeld geweest zijn, maar niet veel fake nieuws dat dan enorm veel impact heeft gehad op zowel inwoners op hun beleving van de crisis of ja, dat soort dingen, ja.

Spreker 1

Nee, dat ben ik wel met je eens, denk ik. Heb nu voor de voor de Rijn toevallig al allerlei Tweets verzameld en daar is ook vrijwel niks tussen.

Spreker 1

En als er wat tussen zit, wat echt fake nieuws is, dan gaat het over het ontkennen van de klimaatverandering. En voor de rest valt het allemaal heel erg mee en het zijn inderdaad ook allemaal kleine twitteraars die dat dan verspreiden. Het zijn geen grote nieuwsstations of zo die dat die dat verspreiden.

Spreker

Precies.

Spreker 1

Maar dat was ook wel te verwachten.

Spreker 2

Ja, ja, nou interessant Als je dat ook gaat doen voor de overstromingen van vorig jaar. Want ja, Misschien hebben wij ook wel iets gemist. Dat kan me ook heel goed voorstellen. Ik hoop het niet, maar ja, dat weet je.

Spreker 1

Ook niet, dus het lijkt er in elk. Geval niet op, dus Dat is. Ja nee, dan ben ik eigenlijk wel door al mijn vragen heen en Ik denk dat ik al mijn puntjes ook wel heb gehad. Heel duidelijk verhaal en ook geval. Dus is hartstikke mooi. Bedankt voor het gesprek in ieder geval.

Spreker 2

Ja graag gedaan en geef vooral aan bij die mensen dat dat je mij hebt gesproken, dus dan weten ze. Ook een beetje laar het vandaan komt en dat helpt, helpt ook bij mij altijd.

Spreker 1

Hartstikke goed dan, dan wil ik jou graag bedanken voor het voor het fijne interview en dat je tijd voor mij wilde maken.