Research Report

A practical insight in guidelines on reaching optimal risk communication

meppel.nl

Veiligheidsregio Drenthe

Hanzehogeschool Groningen
University of Applied Sciences

What criteria and guidelines for optimal risk communication can be identified for the Municipality of Meppel to effectively communicate environmental risks to the citizens of Meppel?

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Preface

This research report has been written in response to the conversations which have been held with the Municipality of Meppel and the Veiligheidsregio Drenthe. The central theme of this research is citizen safety and the accompanying research question relates to how the effectiveness of risk communication within the municipality can be increased. This research is set up to increase the sense of security among citizens.

Two individuals have made a remarkable contribution to this research report: Mrs. Linda van der Heide (company supervisor) and Drs. Peter Pratley (Graduation supervisor).

Executive Summary

This research report 'a practical insight in guidelines on reaching optimal risk communication' looks at the international sphere of risk communication and was set up to analyze the most efficient methods to maximize risk communication effects. Desired effects of risk communication vary from increased citizen awareness of environmental risk, to increased preparedness for crisis situations. The report may provide guidance for municipalities or governmental institutions that want to improve existing risk communication strategies. This research report is written for the Municipality of Meppel, from the perspective of an external communication researcher. Meppel has requested initiative for this research as a follow-up of the *Veiligheidsmonitor*, a province-wide survey that was distributed on the safety-feel of citizens which showed a major unawareness among citizens in the province of possible risks in their environment. Meppel is the first municipality in the province to take responsibility for stimulating risk awareness, the municipality sees this research as a 'pilot', so other municipalities in the province can follow the initiative.

The research process was carried out with the use of opinion research, being the major research method. The opinion research was carried out among four different active citizen groups in the Municipality of Meppel and among five risk communication experts in The Netherlands. The different research questions focused on mapping guidelines and principles for effective risk communication, followed by field research on citizen opinions and risk communication expert opinions. The combination of literature study and field research led to refreshing research results for the Municipality of Meppel. The majority of the citizens indicated that they would prefer to receive concise and practical information about risks in their environment that focuses on providing them with perspective on how to act during possible crisis situations. Furthermore, the risk communication professionals that have took part in this research contributed significantly to the formation of an optimal risk communication strategy for the Municipality of Meppel. They provided have instructions that came down to several points: be open in communication with the citizen, initiate dialogues with them and take them seriously all throughout the risk communication campaign. According to the professionals, most unsuccessful risk communication campaigns fall short in initiating transactional communication, and focus too much on transmitting information. Subsequently, advice have been given to the Municipality of Meppel in the form of a possible risk communication campaign, taking into account the guidelines that have been acquired during the research process. The Municipality of Meppel should firstly create a new risk analysis of the factual risks in the environment and primarily communicate about these risks. Also, the Municipality should facilitate how-to-act knowledge and information through existing communication channels. This way, the new risk communication campaign is cost-efficient. Lastly, it is suggested that the Municipality initiates evaluative research as a follow-up to the new risk communication campaign to measure how citizens have perceived the information that was provided and to maintain the dialogue with the citizen.

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Introduction

When a crisis occurs, the citizens make the difference in the first few minutes and, in contrast to what many people think, not institutions such as the police and fire department. Therefore, it is crucial for citizens to know what to do in case of emergency. The question is: are people open to this kind of information when a crisis have not yet occurred?

This research report analyses the topic of risk communication and identifies how the client, the Municipality of Meppel, can optimize its current risk communication. Individuals who have interest in this research are Linda van der Heide, (Communication advisor for the VRD), Linda Walkier (Head Risk Communication VRD) and Johan Oostra (Safety Director for the Municipality of Meppel).

1. Project Context

1.1. Introduction

In this chapter, insight is given into the context of the project. It is important to understand the larger context of the research in order to understand the background of the issue. Also, a description is given of the organization for whom the research is carried out.

1.2. Research topic

This research takes place in the context of risk communication and researches the most effective communication strategies and methods which can be used for communicating possible environmental risks towards citizens. The research is carried out for the Municipality of Meppel and the Safety Region of Drenthe. Current research conducted by the Veiligheidsregio Drenthe (VRD) shows that the citizens of Meppel are not prepared for possible crisis situations in their environment and would like to receive more information on this topic and that is why the geographical area of this research will be Meppel. The end result and advice can be of interest for any municipality or organization, governmental or non-governmental, involved in risk communication and pre-emptive communication on sensitive topics in the public sphere.

1.3. The client

The Municipality of Meppel, located in the province of Drenthe, has asked the Veiligheidsregio Drenthe to conduct research on the wants and needs of citizens regarding risk communication. Thus, this research is carried out for both the Veiligheidsregio Drenthe and the municipality of Meppel. Because two organizations are involved, it is important to understand the position of both organizations and in what manner they cooperate to guarantee citizen safety. Currently, the municipality of Meppel has expressed their concern on current risk communication with its citizens and would like to see both an analysis of the deficits of the current risk communication and an analysis of the citizens wants and needs with regards to risk communication. The municipality has expressed their interest in a possible communication pilot. The word 'pilot' indicates that the set-up for a new risk communication campaign on risk communication is a test and can be executed and expanded to a larger research size which could be conducted in other municipalities as well, if relevant. However, it cannot be assumed that a new risk communication campaign is the solution to the current deficit in communication. Therefore, new research needs to be done which analyses the extent to which citizens are actually capable of dealing with crisis and what their preferences are in the communication of possible risks.

1.4. Description and background of the Issue

Once every four years, the VRD measures the awareness of citizens of the province of Meppel in the so-called Safety Monitor. The Safety Monitor is a survey which measures the sense of security among inhabitants in The Netherlands and is executed by an independent research centre. The Safety Monitor is the only research that is used until now to measure the sense of security among citizens in Meppel (J. Oostra, Personal Communication, 2016). The Safety Monitor is primarily quantitative and does not

analyze how *self-reliant* the citizens are, which can be defined as "all actions of citizens to prevent crisis situations and to be able to help themselves in times of crisis and minimize the consequences" (Helsloot & Van 'T Padje, 2010, p.252). However, the preliminary research does provide two important figures about current risk communication of the Municipality of Meppel. The Safety Monitor executed in 2013 shows that among the 1285 respondents in Meppel, 69% indicate that they are not aware of what the risks are in their direct environment (Samenwerken aan Veiligheid, 2015). On top of that, an average of 61% specifies that they would like to receive more information about risks in their direct environment. It is not known how satisfied the citizens are about current communication about risks. Therefore, the problem statement of this research is as following:

Currently, citizens of Meppel are unaware of possible risks in their environment and need to receive more information on this topic in order to be able to cope with possible crisis situations.

2. The Organization

2.1. Introduction

In chapter two of this research, the organizational focus of the Veiligheidsregio Drenthe is discussed in order to understand what activities they carry out and even more important, to understand the relationship between the organization and the issue. The organization of the Municipality of Meppel, who is the client of this research, is also explained in this chapter.

2.2. Veiligheidsregio Drenthe

The Veiligheidsregio Drenthe, also referred to as the VRD in this report, is the safety area of the province of Drenthe which is organized by the VRD. The organizational context of the Veiligheidsregio Drenthe is also taken into account as this research is written for the VRD, in request of the Municipality of Meppel. It is important to first understand what a Veiligheidsregio is exactly before further discussing the organizational structure of the Veiligheidsregio Drenthe.

A Veiligheidsregio, in English referred to as a *Security Region*, is a regional control centre which oversees police and fire departments and next to that, cooperates with governmental medical aid institutions to ensure the safety of its citizens. A total of 25 Security Regions exist in The Netherlands. A Security Region acts as an umbrella over existing governmental security institutions in the province (=region), that each play an important role in the safety-guaranteeing of Dutch citizens. Important to mention is that Veiligheidsregio's do not merely oversee these governmental institutions, but facilitate the cooperation between them.

A total of 25 Security Regions exist in The Netherlands. Originally, the 25 Security Regions derived from the *Safety Regions Act,* which came into force in 2010. A build-up of events and crises lead to the formation and collaboration of different provinces in The Netherlands. An example of one of these initial crises is the large fire in a fireworks storage which occurred in Enschede in the year of 2000. Besides the crisis in Enschede, a fire in the nightspot of Volendam occurred in the following year. Both crisis involved many deaths including young individuals. On top of the 'regular' fire crises which occurred in Enschede and Volendam, new risks such as terrorism arose which ''require a different type of approach, different partners and a different strategy'' (Safety Regions Act, 2013, p.5). In other words, there was a need to alleviate municipalities from crisis communication activities as new forms of threats arose and the existing municipalities were unable to cope with crisis management. The security regions are obligated to fulfil the following list of tasks:

   a.   To install and maintain the GHOR (regional medical aid institution)
   b.   To install and maintain the fire department
   c.   To advice the executives of the municipalities on fire services
   d.   To identify risks related to fire, disasters and crisis and to advice the responsible authorities on these factors
   e.   To acquire and manage communal material

    f.   To facilitate the incident room function

    g.   To facilitate communication to citizens about risks and possible crisis situations in the region

    h.   To set up and facilitate the information provision between internal and cooperational services of the security region and external partners (2015)

Now, roughly six years later, safety regions have become responsible for crisis communication plans in the region it operates in. These plans need to contain an overall description of approaches to all of the possible crisis situations (Regtvoort & Siepel, 2012). The VRD as a crisis organization has multiple plans made that are adaptable for all sorts of disasters and crises situations. The types of possible crisis that VRD take into account in the execution of their disaster management plans, frameworks or information flyers are taken into account in following crisis preparation plans:

- Incident and disaster management Groningen Airport Eelde

- Incident and disaster management plan for WPA Zeker en Vast: this plan covers a large transportation company which transports potentially dangerous chemicals

- Disaster framework plan for LPG (liquid petroleum gas) and the distribution of information maps

- Disaster framework plan for power cuts

- Script for flu pandemic

- Script for mass vaccination during the outbreak of smallpox

- Interregional disaster management plan for nuclear power station in Lingen, Germany

- Coordination plan of risky events in the province (Regionaal Crisisplan VRD, 2014)

This list describes the different activities that the VRD is involved in, especially in the preparation for possible crisis scenarios. The management plans will not be thoroughly discussed as this research focuses on risk communication and how this can be optimized. Therefore, it is more interesting to look at the different types of risks and how each of the risks are communicated. An analysis of the risks and according communication can be found in the discussion section of the theoretical framework.

2.2.1. Mission

The VRD stands for several collateral certainties and the citizen can expect that the VRD takes responsibility for these certainties. These certainties are:

1. The VRD acts during incidents and crises situations

2. The VRD increases the awareness among physical safety: the Veiligheidsregio Drenthe does this through the expertise of in-house communication and safety professionals. It does not only advice citizens, companies and other governmental institutions, but connects different institutions that combine the tasks of guaranteeing safety, such as municipalities.

3. The VRD is part of society: the Veiligheidsregio Drenthe wants to play a connecting role in society, in which the citizen plays an important role and a society in which the fire department, the police department and the VRD as an overseeing umbrella cooperate in order to guarantee safety and stimulate the improvement of strategies.

The communication problem that is targeted in this research relates to the second point of the VRD certainties: 'increasing the awareness among physical safety'. After the safety monitor that researched the sense of physical safety of inhabitants of Meppel in 2013, it has come to light that the majority of the inhabitants are unaware of what the environmental risks are in the area they live in. Then, the question is: *how can this be?* It is not a matter of looking for an institution to blame for the deficiency of the current state of awareness, but at least the problem has been concretized. This research therefore takes into account the effort of both the VRD and the Municipality to create awareness, and furthermore how the citizen would prefer to be communicated towards when the topic is risk communication.

2.2.2. Vision

The following four characteristics have been identified by the VRD in their organizational policy, and function as a guideline for its operational tasks:

1. *Connection:* The Veiligheidsregio Drenthe wants to make connections between the partners it cooperates with for the safety guaranteeing of citizens. They do this because they want to make sure that the executive organizations that do the field work, such as the police and fire department, arrive on time whenever there is an incident. By connecting these institutions, internal communication can be improved by locating problems and solving them directly.

2. *Expertise:* The network of the VRD consists of both in-house and external experts that cooperate to provide safety and risk communication advice. Different governmental institutions are involved in this process, especially the municipalities.

3. *Trust:* The VRD does not work as an independent organ but always in cooperation with partners, and that cooperation is built on trust.

4. *Responsibility:* The VRD acts as a responsible organization, it takes the full authority for providing information on crisis and risks in the area it operates in. (Beleidsvisie, 2015)

The issue that is targeted in this research relates to the unawareness of citizens in Meppel on risks in their environment. The communication guidelines of the VRD clearly indicate that it should take on an advisory role in improving the awareness of the citizens that are part of the province the Veiligheidsregio Drenthe operates in. This research will investigate the most suitable strategy for communicating risks to the citizens of Meppel.

2.2.3. Internal structure of the VRD

The organizational structure of each safety region is fairly similar, but may vary content-wise. For instance, the safety region of Amsterdam-Amstelland has an additional water- and shipping safety department which takes care of topics such as the quality of the seawater (Beleidsplan Veiligheidsregio Amsterdam-Amstelland, 2015). To understand how a safety region operates, it is important to understand how it is organized and what organizations fall under the umbrella of a safety region.

The following organizational sketch provides insight in the different organs that are active within the VRD:

Figure 1: Organizational Structure of VRD
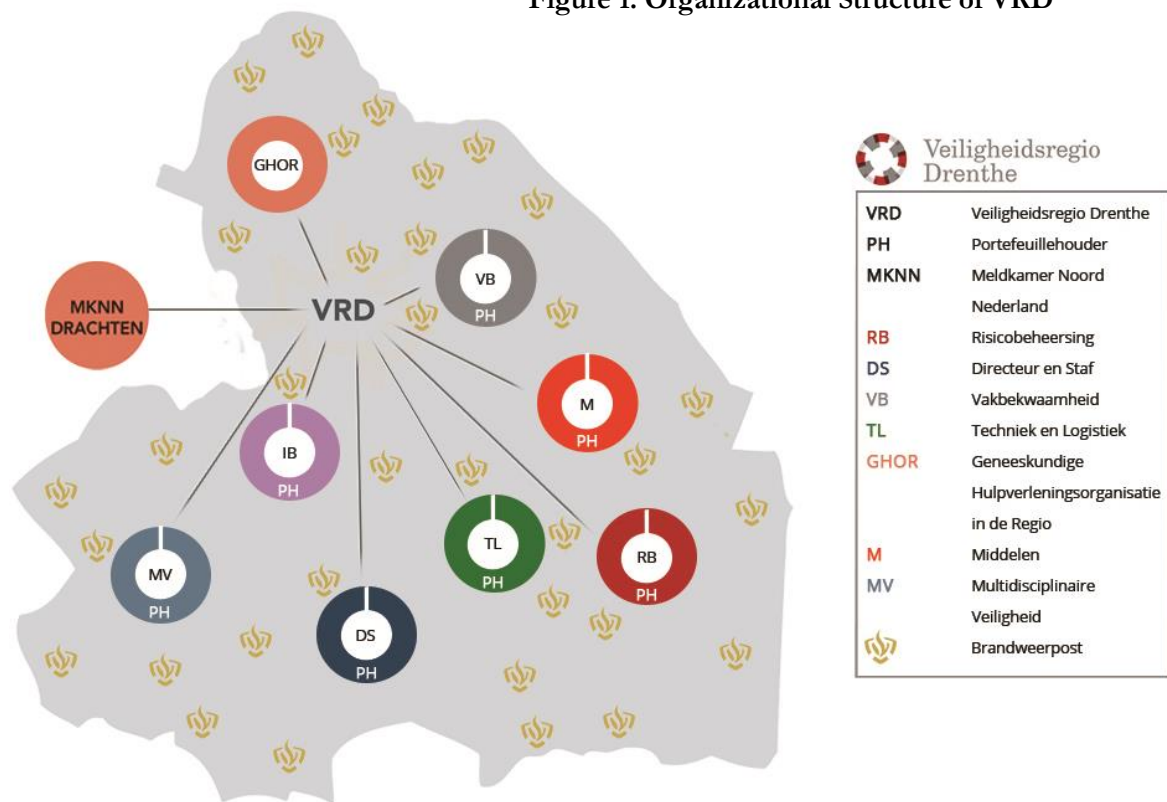
The VRD consists of 7 departments that each has its own task. The different departments can be seen in the legend to the right of figure 1. There is a special department for risk control management, another department regulates the medical aid in the region and the communication department functions as the executive department that connects with the citizens. The golden logos indicate the locations of the fire departments in the province of Drenthe. These departments can be considered as the internal stakeholders as they all play an important role in the effectiveness or ineffectiveness of risk and crises strategies.

2.3.   Municipality of Meppel

The Municipality of Meppel initiated the request for this research. The Municipality has indicated that they would like to see a communication plan that functions as a communication pilot for other provinces and municipalities in The Netherlands. This means that this research is the first research that is initiated on risk communication in the municipality, besides the Veiligheidsmonitor in 2013 that was executed by an external research centre. The limitations of that survey-based research is that it does not go into depth on what the citizens perceive as a possible threat or risk for their individual lives. Therefore, this research is initiated for the Municipality of Meppel to provide a framework for future communication campaigns. Together with the VRD, the research is executed and future communication strategies are also decided upon together, as the VRD functions as an external advisor. No information could be found on how the Municipality of Meppel perceives its own organization, or information related to missions and visions. Then, it is interesting to take a look at existing communication channels, and what the municipality has done so far in terms of risk communication.

Besides the Veiligheidsmonitor, the Municipality of Meppel has another reason for having interest in this research. Before the Safety Regions were located in The Netherlands, all municipalities in had the legal obligation to inform its citizens about risks in their environment (Overheid.nl, 2010). As for 01-10-2010, the law has been taken over by the law that initiated the Safety Regions. The municipalities in The Netherlands now cooperate with Safety Regions to initiate risk communication purposes. In other words, this research may help the Municipality as guidance for future risk communication plans.

2.3.1.   Communication channels

2.3.1.1.   Risicokaart.nl

One of the existing risk communication channels that is available to the Municipality of Meppel is a website called Risicokaart.nl. Here is an example of what the website looks like:

Figure 2: Homepage of Risicokaart.nl

The website provides a map that includes all the environmental risks in The Netherlands. Citizens of each region can go to the website, type in their postal code and receive information about the environmental risks that exist in the area they live in. The website is kept up-to-date by safety professionals who operate on a national level. The website has not been created by the Municipality of Meppel, but is made available to the municipality by *Rijkswaterstaat*, which is the executive agency of the Dutch Ministry of Infrastructure and Environment. The municipalities in The Netherlands can themselves decide whether to include Risicokaart.nl in its risk communication strategy, or not. In the period of this research, it is discovered that the Municipality of Meppel does not use the website in its risk communication strategy, because no strategy has yet been formed (J. Oostra, personal communication, 2016). The municipality does mention it on the safety section of its website. The field research results that form the final part of this research report take into account whether the citizens of Meppel prefer to receive information about this website, and what their impressions are of the website.

2.3.1.2.   Fire department

The fire department in the Municipality of Meppel functions as a risk communication channel as this institution informs citizens about residential risks such as fires and carbon monoxide. Through education on schools, residential checks and several projects, the fire department tries to create awareness and initiate behavioural change. The fire department merely focuses on residential risks in their awareness-stimulating executive plans. Next to that, the risk management team of the Veiligheidsregio Drenthe advises on fire safety for events in the municipality and it executes fire safety checks (Samenwerken aan Veiligheid, 2015).

2.3.1.3.   Local newspaper

The Municipality of Meppel uses the local newspaper 'De Nieuwe Meppeler' to advertise on news updates and new projects that are executed. Besides news, the municipality places the advertisement of NL-Alert, which is the national risk service that alerts citizens on their mobile phone.

2.3.1.4.   Social media

The Municipality of Meppel uses Facebook and Twitter to communicate with its citizens. During the period of this research, the municipality has an estimated amount of 1.200 likes on Facebook and 6.200 followers on Twitter. Both social media channels are used to communicate news, but also for the distribution of new and available vacancies. It is not used for risk communication purposes.

Figure 3: Municipal page in local newspaper

2.3.2. Citizen panel

During this research, it was discovered that the Municipality of Meppel has an external citizen panel which is used to test new implementations on for instance, the municipal website. The citizen panel has not been called upon since several years, but still remains full of potential to use for future risk communication. The citizen panel was an initiative of the municipality in 2013, after the municipality indicated that they needed external expertise and feedback from citizens on new municipal initiatives.

3. Theoretical Framework

3.1.   Introduction

This chapter includes a description of the theories that are identified and used as a support for this research. The theories help to take a critical look at the effectiveness of a new risk communication campaigns. Before the main research question 'What guidelines can be derived from selected theory and preliminary research with regards to optimal effective risk communication?' can be answered, it is important to take a step back and look at what important definitions play a role within risk communication, and of course, what risk communication means exactly. After that, literature study can provide more insight in the effectiveness or ineffectiveness of specific risk communication strategies and supporting theories that the Municipality of Meppel can take into account when initiating a new risk communication campaign.

3.2.   Elaboration of definitions

3.2.1.   Self-efficacy

The well-known scientific definition of self-efficacy during crisis situations, which in the Dutch language is translated as 'zelfredzaamheid', relates to all actions taken by citizens in preparing for emergency or crisis situations, during or after crisis situations, or actions taken to safe oneself or someone else and to reduce the consequences of an emergency or crisis situation (Ruitenberg & Helsloot, 2004, p.9). In other words, self-efficacy or self-reliance during crises is built upon how-to-act knowledge during crisis situations. Before the action takes place, the citizen is informed through general knowledge or through governmental instructions which are distributed through radio, social media or television. Citizens receive this kind of information and then decide themselves what to do with it. In general, the voluntariness of individuals to assist during crisis situations is high. This involves the participation of direct connections such as family and friends, but also from citizens. This is defined as the 'efficacy' of the citizen and is more relatable to the capacity of helping others in the direct environment (Helsloot & Van 't Padje, 2010, p.38).

3.2.2.   Risk communication

Covello (1992) defines risk communication as the "process of exchanging information among interested parties about the nature, magnitude, significance, or control of a risk" (p. 359). This definition emphasizes the importance of elements of a possible risk situation when initiating communication to the public. Also, it describes the process of risk communication as an exchange, in other words being a transactional process between the originator of the message and the receiver. This would indicate that when a new public information campaign on risk communication is initiated, it is important to listen to the public. The Belgic Crisis Centre of Internal Affairs introduces risk communication as a tool to provide an objective evaluation of the risks, so that the citizen can create an estimation of the risk by him- or herself (Crisiscentrum Binnenlandse Zaken, 2007, p.39).

3.2.3. Crisis communication

A distinction can be made between risk communication and crisis communication. As a matter of fact, these types of communication specialisations vary extremely in its execution, but have similarities in its content. Risk communication focuses on raising awareness of possible risks, to wake up individuals to make them more conscious of the threat and to persuade a behavioural change through cognitively minimalizing the threat. Crisis communion focuses more on decreasing the negative outcomes of a crisis when it has already evolved (Reynolds & Seeger, 2005, p. 46). A major difference then between risk- and crisis communication is the timing of the message that is sent by the institution. There are also similarities between risk and crisis communication, as they are both communicative initiatives and used to minimalize the harm to individuals involved, through the use of the most credible communication channels (Reynolds & Seeger, 2005).

3.3. Types of risks

Regtvoort & Siepel (2011) discuss different types of risks that an individual gets to deal with during its life. There are many different kinds of risks and they differ in size and sometimes more individuals are involved. Regtvoort & Siepel divide risks in three categories:

1. **Risks that are predictable and controllable in some manner:** These types of risks seem to clear to fall under risk communication, but they still are a risk to human safety and can sometimes be a danger to human health. Examples of 'type 1' risks are the risk to incur brain damage when not wearing a helmet while driving a scooter. Or the risk of having an increased chance of getting cancer because of smoking. These risks are known and are considered to be normal in the regular day-to-day life.

2. **Risks that are predictable but hard to control, sometimes even unavoidable:** These risks are less transparent but are still predictable. Examples of these types of risks are the results of global warming. As The Netherlands lies under the average water level, the citizens have to cope with this during their lives. The risk is known and there is a possibility that the dykes break, but chances are little and that way it is not considered to be a limitation. Important to mention is that communication plays a role here in the reassurance of citizens. "Climate experts indicate that global warming is a process that cannot be turned around, and the consequences are to be faced" (Regtvoort & Siepel, 2011, p.37).

3. **Risks that are yet unknown to us:** These type of risks come out of nowhere and no plans can be made because the threat is new and a response can only be made on the time being. These risks can be things that individuals are worried about nowadays. Think about the added chemicals, flavour enhancers to processed food. It is only to be seen what the consequences will be on the long-term of these chemicals. This is a specific new risk as is it is relatively new and according to scientific physicians who conducted multiple research studies on the effects of the effects of these are not yet understandable and effects of these additives are to be proven on the long term (Physicians for social responsibility, n.d.). Regtvoort & Siepel (2011) also indicate that when these

new risks occur, the government and in this case the Municipality of Meppel, should find new ways of fight the risk. In other words, old methods that worked for fighting old risks do not provide guarantee in terms of effectiveness for newer risks that can be categorized in this third category. The authors provide more insight on how the municipality can behave when providing risk communication. The citizens, according to the authors, understand that the government does not have the knowledge and material to fully prevent, for instance, new terroristic attacks. The best a government can do is communicate with its citizens and "treat the citizen as a fully-fledged communication partner" (Regtvoort & Siepel, 2011, p.38).

To clarify misconceptions about the types of risks and the meanings of multiple definition, the following list terms and elaboration is provided:

- **Calamity**: An unexpected situation which can cause serious harm or damage.
- **Crisis**: A situation that disturbs the complete functioning of the societal system.
- **Incident**: A situation that disturbs the normal course of events.
- **Emergency**: Something that went wrong and causes damage most of the time.
- **Disaster/catastrophe**: A large accident that affects many lives (Regtvoort & Siepel, 2011, p.47)

As an addition to this list of definitions: the law that introduces the Safety Regions differentiate the terms *crisis* and *disaster*. Crisis is seen as a situation that affects the purpose and importance of society. Disasters, as from the perspective of the Safety Regions in The Netherlands, is not seen as a situation but rather as an event. Besides that, disasters may strike society but mostly affect the health of individuals and the environment (Ministry of Security and Justice, 2013, p.60).

3.3.1. List of specific risks

The list of definitions help to understand the categorization of risks, and in what a risk can possibly evolve in. To concretize the list a bit more, it is useful to place the types of risks in categorized situations and events. Regtvoort & Siepel (2011) have formed a list of all types of disasters and risks that exist. The list is as following:

Specific risk	Clarification
- *Aircraft incidents*	Crashes on or near airports during take-off, landing or during the flight itself. This includes civil, military, passenger or cargo transportation aircrafts.
- *Emergencies on water*	Large traffic incidents with all transportation vehicles on water or individuals who use the water for recreational purposes, such as surfers.
- *Traffic accidents on land*	Large accidents which occur in traffic with any possible vehicle (train, car, etc.)
- *Incidents with explosives in open air*	This type of incident involves both the area of the explosion as the surroundings. The size of the incident depends on the amount of individuals affected.

-	*Incidents with toxics in open air*	Toxics which can spread quickly through the air. This can affect the transportation and traffic as well.
-	*Nuclear incidents*	Incidents surrounding nuclear power stations Also involves the transportation of nuclear material.
-	*Disease waves*	This type of crisis involve the sudden outbreak of a (new) disease, but involve speculations or insights on new diseases as well. The disease wave becomes a threat only if it affects many individuals in a relatively short period of time.
-	*Incidents in tunnels*	Involves the release of chemical goods in tunnels and incidents that cause fire. Tunnels can mean train tunnels, passenger tunnels or terrorist attacks in subways.
-	*Fires in large buildings*	Type of incident with a lot of smoke or chemical damps in buildings where people are. The incident may involve large buildings where less self-efficient individuals live, or large buildings with a public function.
-	*The collapse of large buildings*	Involves the collapse of buildings caused by numerous provocations, for instance through faulty construction work or the overload of the building. It can also be caused by gas explosions, munition-explosives, whirlwinds, earthquakes or subsidence of the ground.
-	*Shutdown of base utilities*	The shutdown of electricity, water and/or gas services, but also communication services such as mobile phones.
-	*Panic in crowds*	Can arise from oppression of individuals in large crowds, on for instance festivals or during sports events or large demonstrations. It is a combination of lack of space and the overcapacity of a certain area.
-	*Large disorders*	Riots, large demonstrations and violent acts during sports events or free-for-all fights in public areas.
-	*Floods*	Involves areas within dykes where the water level rises at least one meter. The water may come from the sea, or the flood may be caused by high water levels in rivers, or through the breaking of a dyke.
-	*Wildfires*	Fires that develop in forests or large nature areas, and which form a threat to individuals living close to the fire in residential or recreational areas.
-	*Extreme weather circumstances*	May vary from extreme heats to extreme colds, and the consequences to society this extreme weather may cause.
-	*Distant crises*	Involves the repatriation of citizens or the national involvement of a country in other countries where a crisis situation takes place. One can think of the

	Dutch involvement of the investigation of the MH-17 crash in Donetsk, which occurred in July 2014 (AD.nl, 2014).
- *Terrorism*	For now the only 'type 3' risk in this list of definitions. Terrorism can be defined as acts meant to dislocate society and intentions to take lives, with possible political intentions. Terrorism has become more transparent to society and many events have proven the seriousness of terrorism (Regtvoort & Siepel, 2011, p.52).

3.4. Theories on effective risk communication

Reynolds & Seeger (2005) state that adequate preparedness of the risk communicators needs effective messages, followed by their persuasive appeals. On top of that, the risk messages need to be communicated via the appropriate communication channels. This relates to the initiative in this research to conduct **public opinion research**, as it is tested what the preferences of citizen are in risk communication and the accompanying channels that are preferred by citizens of Meppel.

Kelay & Fife-Schaw (2009) state that *trust* is the key factor in the success of risk communication campaigns, and that most risk communication campaigns are planned around the assumption that the campaigns intention is firstly to generate more trust. Trust is important because risk communication, in its base, is an expertise in which uncertainties are communicated instead of kept in the dark. From a 'biased' perspective of a communication professional, this idea is relatively strange as it would be the primary goal of a municipality to provide more and new information, in this case about risks in the environment. However, this is not how most municipalities see risk communication and the focus lies more on maintaining a good relationship with the citizen (Keylay & Fife-Schaw, 2009, p.10).

According to Siegrist, Earle & Gutscher (2003), individuals who had past good and satisfying experiences with governmental institutions or the information that was provided in the past, are more likely to trust new information provided by the same source. Siegrist et al. (2003) also state that the individual who has had satisfying experiences builds *confidence* on the long-term. Seeger (2006) states that the municipality could best differentiate risk communication between short-term and long-term. He also states that one-way communication tends to be more appropriate when communication about short-term scenarios and risks in the environment. Two-way communication, then in the form of a dialogue, should initially be deployed when communicating about long-term risks and major risks for citizens. (Seeger, 2006, p. 235-237).

The Belgic Crisis Centre of Internal Affairs has released guidelines that provide insight in effective crisis communication. The report states that individuals approach a risk in each situation by looking at the societal context. Besides that, individuals create a personal estimation of the risk and potential danger of the risk. The manner in which they accept the risk depends, according to the Belgic Crisis Centre of Internal Affairs, on their pre-knowledge and the availability of information to create a solid opinion and

attitude (Crisiscentrum Binnenlandse Zaken, 2007, p.39). The receiver of the information then judges the credibility of the information and link some sort of behaviour to the risk that has arisen.

There is a discussion about what the content focus of risk communication campaigns should be, in order to achieve optimal efficiency. Witte & Allen (2000) have researched the efficacy of messages and what kind of content reaches the most behavioural change. They state that the use of messages with high-efficacy content, which is reached through the use of fear appeal, is more effective in risk communication campaigns. They have made the following recommendations to risk communication practitioners:

1. Risk communication practitioners "can develop messages with fear appeal through referring to the **severity** of the threat" (Witte & Allen, 2000, p.606). Also, the use of **personal** language should help in reaching behavioural change. This way, the susceptibility of the individual is targeted, because they are spoken to directly.

2. Weak fear appeals, according to Witte & Allen (2000), do not change behaviour. Therefore, a municipality such as Meppel should select the most serious threat to Meppel and present it to the audience.

3. A behavioural change among citizens is only reached when the message that is attached to the campaign with fear appeal is equally strong. The authors, furthermore, state that when an initiator of a risk communication campaign wants to maximize the efficacy of a risk, it should provide suggestions in terms of actions that can be taken.

4. Very important, the researchers state that characteristics such as changes in demographics do not attribute to different processing of fear appeal messages. This however, is something different than risk awareness, which is discussed later in the chapter.

5. Witte & Allen (2000) state that it is important for the initiator of a risk communication campaign to evaluate the responses of a campaign. There is always a possibility that the campaign has unintended outcomes.

3.5. Theories on effective public information campaigns

An early research on the effectiveness on public information campaigns by Hyman & Sheatsley (1947) shows that the ineffectiveness of information campaigns involve two important aspects: selective exposure and the role of interest. They state that individuals will not change their behaviour simply when the amount of information is increased. A more recent research by Regtvoort & Siepel (2007) states that when the initiator of a public information campaign want to bring across a message with a maximum reach, it is important to tune the communication to the target group, in terms of wants and needs. This emphasizes the importance of measuring the interests of citizens of Meppel in this research when creating a new information campaign. The sense-making approach introduced by Dervin (1998) mentions an essential aspect in the information-seeking behaviour of individuals. It describes how individuals primarily inform themselves at moments of need and that people assess information in terms of how it helped them instead of a tool to overcome a lack of knowledge or fear.

Research by Dynes (1994) has formed several guidelines for governmental institutions which can be followed when initiating a new risk communication campaign. Dynes indicates that in many countries, risk communication and crisis management was organized according to military doctrines, also named the three C's: Chaos, Command and Control. Throughout the years, the model has been edited and revised. Dynes (1994) has introduces a new concept, with three new C's: Continuity, Coordination and Cooperation. Dynes insists that emergency situation create dissonance among citizens, and that the most efficient way of solving the issues that arise during the dissonance is through using existing social structures. It is interesting to go through the new C's formed by Dynes, as they can provide guidance for future risk communications for the Municipality of Meppel, and for other municipalities involved.

- Continuity: Dynes speculates that the best indicator of citizen behaviour during emergency situations is their behaviour prior to the crisis or emergency situation. As said before, existing social structures are the most important tool to provide information during crisis situations. The good thing about this is that this means that most citizens will not act irresponsible. Therefore, it provides room for the municipality to cooperate with the citizens instead of deciding for them. Dynes also insists on keeping the message of risk communication as understandable as possible, taking into account the public that the municipality wants to reach.

- Coordination: Effective crisis control and risk management (the outcome of risk communication) is reached through effective planning and repetitive activities. This involves the build-up of personal contacts and shared operational facilities.

- Cooperation: Dynes mentions the importance of volunteers in effective crisis control. This does not involve risk communication, but is still important as it decreases the possibility of negative consequences after crisis situations.

Rice & Atkins (2012) have conducted significant research on the effectiveness of public information campaigns and have identified several theories that, according to them, are applicable to almost all public information campaigns. Firstly, there is the *instrumental learning* theory introduces by Hovland, Janis & Kelley (1953). The theory introduces a learning mechanism which goes through multiple steps with concepts focused on the content of messages, supported by the credibility of the sender. Hovland et al. (1953) state that the sender of a message, who has the intention to change the behaviour of the receiver, should always take into account its own credibility as well as the wants and needs of citizens in information, in this case risk information. This relates to this research orientation of conducting field opinion research among citizens in Meppel, to check their current information-seeking behaviour and to analyze their wants and needs in terms of risk communication.

3.6. Theories on public behaviour and risk perception

3.6.1. Demographics and risk perception

Some research points out that there are gender differences in terms of preferences in risk communication. It however has not been researched what exactly the differences in risk perception are in terms of gender. Mushkatel & Perry (1984) indicate that risk awareness and preparation to these risks can be related to sociodemographic characteristics. These characteristics can be education, ethnicity and income. In general, the individuals with a higher socioeconomic status are better prepared to crisis situations as they have more opportunities to receive risk-related information, through for instance television or newspapers. Minorities, such as darker ethnic groups overall experience more difficulty in coping with crisis as they have relatively lower income and more problems with communication with the institutional providers of information about risks (Fitzpatrick & Mileti, 1994, p.79-81).

3.6.2. The public and its behaviour during crisis

Different research points out that communities that are struck by crisis situations more than others, so-called 'disaster-subcultures' (Helsloot & Van 't Padje, 2010, p.30) are more capable of responding to crisis situations than communities that have not yet had encounters with crisis situations. They are not only more capable of dealing with the crisis, but respond faster and more adequate through their experiences in previous crisis. The experiences with previous crisis however does not mean that they are more prepared to other dangers and crisis situations, in terms of knowledge and physical preparedness. This would indicate that the Municipality of Meppel is less likely to be able to cope with crisis situations than municipalities in for instance, Groningen, where citizens have experiences with risks such as earthquakes due to the large recovery of gas.

Research has also indicated that an individual only thinks about responding to a crisis situation, when the threat becomes genuine to him or her (Perry, 1985, p.70). According to Ira Helsloot, one of the most influential risk- and crisis communication experts in The Netherlands, this behavioural thinking can be explained according to two factors: 1. The citizen decides how reliant the authority is who warns him or her. 2. The location of the disaster, the time of the disaster and the force of the disaster (Helsloot & Van 't Padje, 2010, p.31). The individuals who do not trust the sender of the message will check to verify and seek for confirmation of the warning provided. This only involves the communication during crisis situations, not during risk communication. For risk communication, this would mean that the local municipality has made sure to have provided credible and useful risk information material that can be used during the evolved crisis situation.

3.6.3. Risk perception

A theory that explains the need for protection in risk communication is the protection motivation theory. According to this theory, individuals are more likely to protect themselves when they experience or are engaged in negative consequences of risks (Glendon & Walker, 2013). Another significant theory related to risk reduction among citizens is the social control theory. This theory states that there is a relation to the employment of an individual, and that the sense of security is higher when they have a part in organizations or volunteer programs (Hirschi, 1969). In some cases, individuals want to know in what level they are at risk and will base their decisions upon that knowledge (1969).

Furthermore, different models have been developed related to the individuals risk seeking behaviour and to the way they process new information related to environmental risks. Firstly, there is the Risk Information Seeking and Processing Model (RISP), which was first introduced by Griffin et al. (1999) and further developed and edited by other researchers. The RISP model has significant relations to the uses-and-gratification model by Katz, Blumler & Gurevitch (1974) and Rubin (2002). It explains how individuals seek judgemental confidence that is caused by a need to inform oneself sufficiently. Griffin et al. (1999) also state that the need for information is supported and fuelled by an information insufficiency. Another theory that emphasizes on the information need of individuals is the Integrative Theory of Behavior Change, which explains that underlying beliefs contribute to differences in norms, attitudes and self-efficacy when perceiving new information (Capabella, Fishbein, Hornik, Ahern, & Sayeed, 2001). These risk perception theories provide an important base for this research as they emphasize on the aspects of motivation, involved emotions and interests of the public when perceiving new information.

3.7. Patterns in theories

Many different theories can be identified on the topic of risk communication. Several patterns can be identified through the theories which have been formed in the international sphere of risk communication. It can be questioned what the most effective content is of a risk communication campaign, but it appears that fear is an important aspect in determining the effectiveness of a campaign. Some researchers think that risk communication should function as some form of trust management, as individuals who, for instance, live in a municipality, already have some sort of relationship with the municipality he or she lives in. Several theories point out that individuals have personal motives when obtaining information, the good old 'selective exposure' seems to be an important motive. The Municipality of Meppel should look at the target group of the future risk communication campaign, and identify the interests. One more reason to conduct opinion research. An example of a Dutch campaign which did not produce fear-appeal content in its risk communication, is the 'Denk Vooruit' (*translation*: think ahead) campaign in The Netherlands. It appeared to be rather unsuccessful (Helsloot & Van 't Padje, 2010, p. 44-45). Individuals who saw the campaign, were notified about that they should better prepare for a future crisis, and should buy certain equipment to be able to better prepare for a crisis situation.

4. Research Design

4.1. Introduction

This chapter provides insight in the steps taken during the research process. The entire research design is written according to Verschuren & Doorewaard: Designing a Research Project (2010). The stage of this research in the intervention cycle, mentioned by Verschuren & Doorewaard (2010) can be found in this chapter, accompanied by the research objective. This chapter also provides guidance through the research question which are set up by the junior researcher to identify how the Municipality of Meppel can reach optimal risk communication.

4.2. Research framework

According to Verschuren & Doorewaard (2010), five stages of the research process exist, identified as the intervention cycle, as can be seen on figure 1. This research focuses on analyzing existing risk communication theories and best practices in risk communication (diagnosis), which will be used to create a new and first risk communication plan (design oriented), taking into account the new insights.

The issue is known and acknowledged within both the VRD and the Municipality of Meppel. Currently, both organizations agree that more in-depth research needs to be done. The Municipality of Meppel has expressed their interest in a first communication plan (pilot) to test how the citizens respond to new communication strategies. However, it cannot be assumed that a new communication plan is the solution to the current state of unawareness about possible risks among the citizens of Meppel. There is a shortage of in-depth research done on the perspective of citizens on risk communication.

Figure 4: The Research Framework
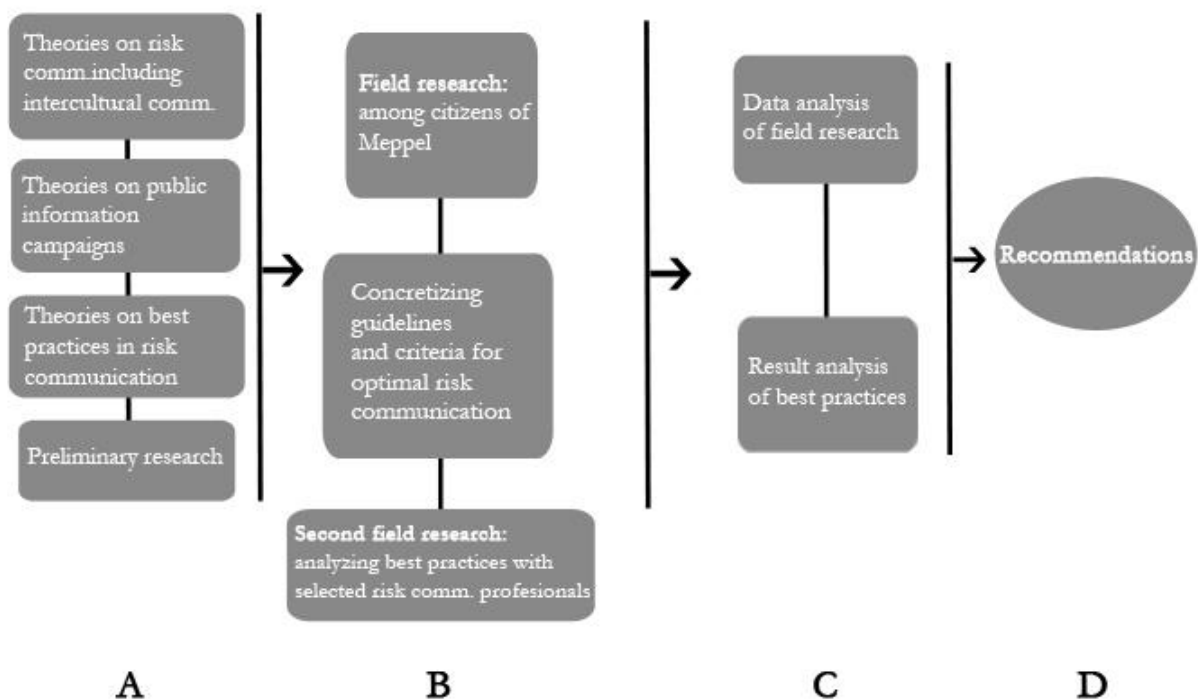
4.3.   Research questions

After the different stages of the research framework is discussed, it is important to look at how the optimal risk communication strategy for Meppel can be reached. Verschuren & Doorewaard (2010) state that proper and efficient research questions should have a steering function, which means that the questions should provide insight in what should happen in the research process in order to reach the desired outcome. The main research question that relates to the A-part of the research is as following:

A: **What guidelines can be derived from selected theory and preliminary research with regards to optimal effective risk communication?**

The sub research questions that relate to the A-part of the research framework are as following:

A1: What does the theory say about the different types of needs or interests that citizens have in risk communication?

A2: What are the most important risks and does risk communication require a situational approach?

A3: What is known about the psychological processes behind the risk perception of an individual?

A4: Which lessons for risk communication by municipalities can provide insight for future and optimal risk communication?

A5: How does the Municipality of Meppel take into account intercultural differences in its risk communication?

A6: What are the reasons for the Municipality of Meppel to improve its current risk communication?

The main research question that relates to the B is as following:

B: **What are opinions on optimal risk communication?**

The sub research questions that relate to the B-part of the research framework are as following:

B1: What is known about the do's and don'ts when initiating a new public information campaign?

B2: How is the effectiveness of risk communication determined?

B3: Which types of communication methods do risk communication professionals consider to be most effective?

B4: What channels do the citizens of Meppel prefer to receive information through about risks in their environment?

B5: How self-reliant are the citizens of Meppel in cases of crisis?

B6: What risks do citizens consider to be important to take into account in risk communication by the Municipality?

B7: What risks should be covered in a first communication plan on risk communication in Meppel?

B8: What is the difference in communicative strategies for different environmental risks?

B9: What are dominating types of emotions behind the individuals need to inform itself on risks?

The main research question that relates to the C-part of the research framework is as following:

C: **What recommendations can be made from preliminary analysis and field research about creating an optimal atmosphere for new risk communication?**

The sub research questions that relate to the C-part of the research framework are as following:

C1: What types of needs and/or preferences of the citizens of Meppel on risk communication does the municipality need to take into account in a new risk communication strategy?

C2: What can the Municipality of Meppel do to effectively communicate more about environmental risks?

C3: What are the most effective communication methods or strategies which can be used to communicate possible environmental risks to the citizens of Meppel?

C4: How can the citizens of Meppel become more aware of possible environmental risks?

4.4.   The Research Objective

The purpose of this research is:

A) to make recommendations on how the Municipality of Meppel can optimize its risk communication strategy towards citizens in a first communication plan, that identifies the most effective communication methods which can be used to communicate environmental risks to its citizens

B) By identifying (international) guidelines and criteria on risk communication strategies and gathering data through opinion research on citizen and risk communication experts opinions

4.5.   Key concepts

This research consists of a build-up of steps which lead to the final recommendations for the Municipality of Meppel. The first (A) stage consists of identifying useful theories which provide insight on how the Municipality of Meppel can communicate risks more effectively to its citizens. This phase primarily focuses on mapping the best practices. The preliminary analysis in the A-phase provides insight in the operational tasks of the organization. The second (B) stage of the research consists of identifying different criteria which can be found in best practices in the international context. Additional field-research will be conducted through personal interviews with both risk communication experts and citizens of Meppel. The opinion research helps in working towards an optimal risk communication plan as it checks expert opinions and different types of citizen needs in risk communication. The interviews will be evaluated and thoroughly analyzed in the third (C) stage of the research, which provides the base for the recommendations in stage four (D).

4.6.   The international context

Even though the focus of this research is on a local issue, the research has additional international and intercultural aspects. International best practices of risk communication are analyzed to concretize different criteria and guidelines of effective risk communication that can help in optimizing a new risk communication strategy for Meppel, and to discover new and effective ways of findings solutions to similar issues in risk communication contexts. This supports the municipality's need to optimize its current risk communication strategy, as new insight in risk communication is provided. Intercultural aspects will be analyzed through identifying how the Municipality of Meppel takes into account intercultural differences in its risk communication. Furthermore, it will be examined if these intercultural aspects are taken into account in the international best-practices, in the A-phase of the research.

5. Research Strategy and Methodology

5.1. Introduction

The research strategy can be defined as all the decisions taken by the researcher and the way in which the research is carried out. The main purpose is to collect relevant material and to translate the material to valid and useful answers (Verschuren & Doorewaard, 2010). This chapter provides insight in both the research strategy taken as well as the methodology and reasoning behind the decisions.

5.2. Research strategy

To discover the correct way in which the Municipality of Meppel should carry out future risk communication initiatives, different opinions of both citizens of Meppel and risk communication experts are researched in the field research of this research. The following research strategies are used for this research:

- Desk research (literature study)
- Survey (qualitative field research among experts)
- In-depth interviews (qualitative field research among citizens)

The Municipality of Meppel has indicated that it is the first municipality in the province of Drenthe that wants to start a risk communication campaign. The Municipality of Meppel has not yet carried out risk communication by itself. The municipality has based its desire to carry out a risk communication on the outcomes of an earlier research, which points out that the majority of the inhabitants are unaware of what the risks are in their environment (*See: Chapter 1, paragraph 1.4.*). A risk communication campaign however, cannot be initiated out of the blue and the municipality has stated that it does not know what kind of channels and messages are preferred by its citizens. In other words, the problem is known but a solid strategy still needs to be set up. The focus of this research is on qualitative data collection through opinion research, because the municipality has not yet performed dialogue with its citizens and because no strategy has been formed yet. Quantative data collection methods therefore are not suitable for this research purpose, because it could provide large numbers but would not clarify which strategy is most suitable for the Municipality of Meppel. How do the citizens of Meppel want to be spoken to and what do risk communication experts think about the most suitable risk communication strategies for a municipality? This will be examined by initiating communication with both citizens who are active in different platforms in the specific area of Meppel they live in, and by sparring on the most effective risk communication strategies with risk communication experts. These are the research objects of this research.

The combination of opinion research and literature study on existing effective risk communication strategy will most likely provide useful information from which a well-advised risk communication strategy can be formed.

5.3.   Research methodology

The entire research, as can be seen in the research framework, consisted of four steps. The A-part of the research was desk research and its purpose was to discover and map major principles in the international context of risk communication that the municipality can take into account when initiating a new risk communication campaign. The results of the preliminary analysis has been processed in the theoretical framework. The field research, which took place in the B-phase, focused on mapping expert opinions and testing the criteria that have been derived from preliminary research. The topic of intercultural sensitivity has been taken into account all throughout the research process.

5.3.1.   Citizen group panels

After the first month of preliminary research and starting up the research, the field research was started by having conversations with the Municipality of Meppel. It became clear that the Municipality works with so-called regional directors, who stand close to the citizen and initiate communication with the citizens for dialogues. The regional directors were contacted, in this case Henk den Toom, who provided detailed information about active citizen groups that are active in each district of Meppel. According to him, a total of six citizen panel groups were active in Meppel and that each of the groups consists of an average of around ten citizens. Then, the citizen groups were contacted through mail. The emails were sent in Dutch, with the official invitation as an attachment to the email. (*See: Appendix, paragraph 3.1.*)

The responses to the email were relatively quick and the overall response of the citizens was enthusiastic. Appointments were made for arranging the group sessions. Unfortunately, out of the total of six citizen group panels, two panels were not able to participate in the group sessions. The reasons for not being able to participate were that citizen group panel that operates in the district 'Koeberg' was not able to participate due to time constraints in their agenda and the other citizen group panel 'Berggierslanden' did not respond to the invitation or follow-up email. The idea for the group sessions was to get together with the citizens in each district, and to have an interactive session with the citizens guided by a presentation. The presentation (*See: Appendix, paragraph 3.2.*) was entirely based on a qualitative survey that was made before the group sessions, in which the research questions were translated in practical questions for the citizens. All of the questions asked were open questions. Open questions were chosen to stimulate dialogue with the citizens and to create more space for them to think about the risks in their environment and in what manner they are informed already.

To give an insight in the group sessions that were held, here is the main list of questions that have been asked during the group sessions with the panels:

1.   What are your personal preferences in receiving information about risks in your direct environment?

2.   On what kind of risks would you like to receive more information?

3.   How should the information, from your perspective, in risk communication be?

4.   Are you currently satisfied with the way the Municipality of Meppel communicates about risks in the direct environment you live? Why (not)?

5. Do you think that information about risks in the direct environment of Meppel should be translated to different cultures? For instance, for tourists and visitors? Why (not)?

6. How would you describe the role of the Municipality of Meppel in providing information on environmental risks?

7. What channels do you currently use to seek out information about risks in your direct environment?

8. What kind of channels would you prefer to receive information about possible environmental risks?

9. Wat is your impression of the website of Risicokaart.nl? (shown during presentation)

10. What is your impression of the *Denk Vooruit* campaign? (The Dutch 'think ahead' risk campaign)

11. What do you think are the possible risks in your direct environment?

12. What would motivate you to seek out information on risks in your environment?

13. How do you think your citizen participation group can assist in risk communication of the Municipality of Meppel?

The attendance and turn-out of the group sessions was not equal during each session. The citizen panels in each district decided themselves who would take part in the session and with how many people they attended. To make a sketch: the first group session had four participants, the second one had eleven participants, the third one had seven participants and the last one had three participants. Each of the sessions were held in a community centre in the specific district where the panels operate. The sessions took between one-and-a-half and two hours.

5.3.2. Risk communication expert panel

Four risk communication experts took part in this research. Ira Helsloot could not fill in the survey because he has published a lot of research on effective risk communication already, but he gave valuable insights. In some way, the researchers can be seen as sparring partners. The other four risk communication experts filled in the qualitative survey. The following experts have participated:

- **Floor de Ruiter:** Co-founder and partner of Flying Elephants, a Dutch advisory organ on organisational operations and management. Expert in the field of organisational- and communication culture. He also provides trainings for top-managers and directors in the political field.

- **Professor Dr. Ira Helsloot:** Expert in the field of public safety, co-editor of the Journal of Contingencies and Crisis Management and senior professor on physical safety and crisis management. He has advised many governmental institutions on their risk communication strategies.

- **Roy Johannink:** Freelance cisismanagement- and social media expert. He advises organisations through creating new policies, research and by providing trainings. He has cooperated with

mayors in The Netherlands for multiple years and has provided them with advice in times of crisis.

- **Gert Klooster:** Ex-journalist and ex-editor for numerous media channels in The Netherlands. After his journalistic career, he has gained 8 years of experience as an external communication advisor for municipalities. Also, he worked as an independent communication entrepreneur. At the time of this research, he was project leader and communication advisor for the municipality of Stadskanaal and external risk- and crisis communication expert for the Safety Region of Groningen.

The risk communication experts have received questions about topics that have been defined in the end of the literature research. The topics that have been taken into account in the formulation of the questions are: suitable communication channels for risk communication by the municipality, efficient messages and related content, successful- and unsuccessful existing risk communication campaigns, risk communication and intercultural communication,

5.4.   Data collection method

The group sessions with the citizen panels in Meppel have been recorded in order for the session to be as interactive as possible. With respect to ethical standards and privacy of the participants, the recordings are deleted after the full analysis and after the results have been fully processed. The risk communication experts have sent their reply on the qualitative survey through mail.

5.5.   Limitations

Just as important as the implications and research methods used during this research, it is important to acknowledge the limitations. During the research process, several limitations were encountered that had effects on the outcomes of this research. For instance, the limitation of time resulted in constraints in the field research. The planning of the group sessions especially had cost a relatively large amount of time. Furthermore, the measure used to collect the data is questionable. It was chosen to do a qualitative survey, but a quantative survey might have led to more reliable and significant results. However, the research methods of this results of this research have been thought through carefully, and the overall results of the field research data is refreshing. According to the NCBI (2011), qualitative research generally need to make sure that they are *reliable* and *valid*. Reliability relates to the stability of the data and validity relates to honesty of the research data. The settings of the group sessions were made as optimal as possible to stimulate the validity of the results. All citizens who participated came unprepared and added notifiable opinions that contributed to the outcomes of this qualitative research. The reliability of this research is the only questionable part, but that relates to the number of participants in the research. Future research could provide more represented numbers.

6. Research Findings

6.1.   Introduction

After the hand-in of the research proposal and after the literature study has been completed, it was time to conduct field research and discover the true implications of guidelines and principles of risk communication. The research results are discussed in this chapter and provide insight in the overall answers given during the group sessions and the qualitative surveys answered by the risk communication professionals.

6.2.   Group session results

The outcomes of the group sessions are generalized, as it was analyzed that not every answer that was given can attribute to the improvement of current risk communication strategies of the Municipality of Meppel. Some questions have been combined as they were not answered by all participants, but some answers were still relevant so they have been included. The list of questions from the qualitative survey which was used as a guideline for the group sessions, can now be discussed as the recordings have been fully analyzed.

1. **What are your personal preferences in receiving information about risks in your direct environment?**

Overall, the answers given by the citizens focused on receiving practical information on risks in their environment. It has been strongly revealed that most of the participants have never thought of possible risks in their environment, but that if they do want to receive information on risks in their environment, that they want to receive it in a practical way which provides them with 'action perspective'. This means that most of the participants do not want to receive information that merely informs them about the risks, but that they want to know exactly how they can respond to the risks.

2. **On what kind of risks would you like to receive more information?**

This question was asked to the citizens of Meppel in relation the one of sub questions of this research: '*What risks do citizens consider to be important to take into account in risk communication by the Municipality?*' The majority of the participants indicated that they primarily wanted to receive information that relates to the actual risks in their environment. It has not been discussed whether they were aware of the risks in their environment, because the Veiligheidsmonitor has already proven that. In Haveltermade, individuals were especially concerned about risks related to the transport of chemical goods. During the group session, they all reached unity on that they wanted to receive more information on this environmental risk. In the group session of Nieuwveenselanden, the participants mostly stated that they do not want to receive more risk information. One participant stated: "*None. It would make me crazy and I do not want to worry about that the entire day. The municipality could better provide me with practical information*". It was pleasant that the respondent gave a suggestion, and not merely gave an opinion. Multiple participants in the district of Nijeveen stated that they primarily want to receive information from the municipality when a crisis occurs. This does not mean

that they refuse information which would provide them with action perspective during a crisis situation. They are still open for that type of information.

3.   How should the information, from your perspective, in risk communication be?

Most of the participants in the group sessions wanted clear and practical information. The word practical was a red wire that ran throughout the group sessions. Practical, in a sense that they would prefer action prospects instead of a simple notification. Only one participant, in the city centre of Meppel, indicated that he would prefer to receive an extensive flyer. He however, did not describe whether this would be a solid document or whether he could read it online. There is a line in the other answers he gave, because he wanted to receive risk information mostly online.

4.   What channels do you currently use to seek out information about risks in your direct environment?

This question was asked in relation to research sub question B4: *What channels do the citizens of Meppel prefer to receive information through about risks in their environment?'*

Most of the participants state that they currently do not look for risks in their environment, but that they are aware of some of them. Most of the participants indicated possible risks such as trains that transport chemical goods, possible fires such as in gas stations. The focus was mostly on chemicals, and as the participants stated, things they could not see. That brings up the most fear in the participants.

5.   What kind of channels would you prefer to receive information about possible environmental risks?

This question was asked in relation to research sub question B4: *What channels do the citizens of Meppel prefer to receive information through about risks in their environment?'*

All of the participants in the four group sessions have indicated that they want to receive reminders on risk information, preferably on social media channels and throughout other traditional media channels such as the newspaper. In other words, when a new campaign would occur, they prefer to see notifications on multiple channels.

6.   What is your impression of the *Denk Vooruit* campaign?

Two of the 25 participants knew the Dutch 'Denk Vooruit' campaign, which focuses on preparing individuals by informing them about what practical goods they need. This question was asked to identify whether the content of an old risk communication campaign in The Netherlands was relevant to them. It was identified that all participants liked the flyer that was given as an attachment to the municipal guide/newspaper. This flyer was one of the tools that was used during the campaigns, and most of the participants liked the content. Two of the participants implemented the flyer in their own house, by attaching it to the wall in a practical location.

7.   What would motivate you to seek out information on risks in your environment?

All of the participants state that they need a reason to look for information. On the one hand, they need a trigger, such as information that informs them about risks in their environment, but on the other hand participants say that they will not look for information until a crisis actually occurs. All three citizens who participated in the group session in Nijeveen stated that they will not reach out for information unless they face a serious threat. This is mentioned several times during the other sessions as well,

8.   Do you think that information about risks in the direct environment of Meppel should be translated to different cultures? For instance, for tourists and visitors? Why (not)?

Most of the participants stated that the municipality should take more initiative in translating risk communication policies. Just a few of the participants stated that whenever individuals from different cultures come to Meppel that they should integrate and learn the Dutch language. It is questionable in what manner the Municipality should take these comments into account. The majority of the participants still states that whenever the municipality communicates in Dutch as the primary languages, they will not have any problems with the risk communication being translated in English.

6.3.   Expert panel results

Four risk communication experts have participated in this research. The outcomes are analyzed in this paragraph. The analysis of the following questions which have been asked to the risk communication professionals can contribute to a future risk communication strategy of the Municipality of Meppel:

1.   When is risk communication effective or successful?

According to Floor de Ruiter, risk communication is effective or successful when the government, municipality or institution that provides the risk communication, does so with minimal interventions but has maximal outcomes. Roy Johannink states that risk communication can be considered as a success whenever the receiver (the person that is exposed to the threat) realizes that the threat is real and that something can happen, he or she realizes that the risk carries certain consequences. In other words, he states that individuals are mostly unaware about the consequences instead of the risk itself. According to Ira Helsloot, citizens always ask for more information on risks but subsequently do not use the information.

2.   Who is, according to you, the most suitable sender of risk communication?

Floor de Ruiter thinks that the sender of risk communication should be determined by the type of risk. This indicates that every type of risk requires a different communication method. At least, whenever for instance terroristic threats become real in The Netherlands, this should be communicated by the national government instead of the local government. Roy Johannink states that the party that is responsible for the risk should communicate about it. This means that whenever a gas station explodes, the gas station

communicates about the explosion. The Municipality however has the legal obligation to communicate about risks and crisis that are active in the municipality.

3.   How do you contribute to enlarging the self-efficacy of citizens as a government?

Roy Johannink thinks that governments should connect to the capacity that individuals already possess in handling crisis scenarios. Risk communication, in his perspective, should not be patronizing but take place from the perspective of the citizen. This means, that the municipality can look at what individuals already do to handle risks in their environment and how new information can connect to that.

4.   Which strategies is the best in risk communication, according to you?

Roy Johannink refers to his article 'Risicocommunicatie: tijd om risico's te nemen!' (Translated: risk communication, time to take risks!). Johannink & Leeuwerink (2015) state that governmental websites are too much focused on the risks and what they themselves can to reduce those risks. Too few people watch the content on those websites, such as Crisis.nl and Risicokaart.nl. The authors state that the communication should become more active. They give multiple suggestions to do so:

- **Initiate risk communication at sensitive moments:** for instance whenever a new event occurs. Through effective and creative messages, more awareness could be created.

- **Use the efficacy of individuals:** Do not provide the citizens with new repetitive information, but use the knowledge they have and what they have done so far to prepare in crisis situations. Also, municipalities can provide information in a practical way, for instance about the best locations to install carbon monoxide alarms.

- **Social media provides opportunities:** The combination of speed, interaction and the possibilities of sharing allows the quick spread of messages.

Gert Klooster refers to effective communication by means of temporary providence and the importance of giving vivid and how-to-act information.

5.   What, according to you, does not work in risk communication?

Gert Klooster states that the involvement of non-authorities can create chaos in a situation that is troubled already. There should be one source of information according to him. Floor de Ruiter states that providing "dishonest information" and "not being honest" are absolute no-go zones in risk communication.

6.   Should risk communication be about risks in the direct environment, general risks or both, and why?

Roy Johannink states that risk communication should involve both the risks in the environment and more general risks. According to him, risk communication is about making people aware of whatever they can face outside of their residential area. He also mentions the importance of travel warnings, whenever there

is a dangerous threat in another country, the government also advises not to travel to the country where the risk is. "Happy that that exists", Roy states.

7. What has your preference and why: one communication message for all risks or separate campaigns for different type of risks?

The risk communication professionals indicate that two strategies are effective. Whenever a governmental institution communication focuses on the preparation phase (risk communication), it would be most sensible to communicate about multiple risk but provide short and concise how-to-act information.

8. What do you think are the most suitable communication channels for risk communication?

The risk communication professionals consider the most effective channels to be the channels that the citizens are active on, and where most citizens are. "Fish where the fish are", Roy says. "Press conferences" was also mentioned, but "social media" dominates.

9. In what ways can the government make risk communication more interactive or two-way?

The risk communication experts state different things about how risk communication can become more two-sided. The municipality, according to Roy, could monitor risks that individuals do not perceive as risks in the first place.

10. When informed, what do you think about *Risicokaart.nl?* What possibilities or improvements do you see?

The authors question the effectiveness of Risicokaart.nl. The website that describes the specific risks in the environment of the visitor is, in the eyes of the risk communication professional, too vague and does not connect to the real perception of individuals of risks in their environment.

11. What is your opinion on the *Denk Vooruit* campaign? What possibilities or improvements do you see?

Roy Johannink thinks the Denk Vooruit campaign is rather strange. He points to the article he wrote, in which he writes that governments communicate too much passive information, and should communicate more with the citizen. The other risk communication professionals confirm this tactic. All authors state that crisis situations that have been created by the government do not have any effect.

12. What is your opinion on environmental risks and intercultural communication? Should risk communication be adapted to different cultures (tourists for instance)? Why (not)?

The risk communication professionals indicate the importance of translating risk communication. "Whenever I come into a new environment, I would like to be notified about risks that are active in the environment. That could be done in The Netherlands as well. Think of a forest or a lake, where the tourists are." (Roy Johannink). Gert Klooster states that in the preparation phase, which is the risk

communication phase, information can be translated whenever there is an indication that there are a lot of non-Dutch speaking individuals in the region.

6.4.   Discussion and conclusion of results

The insights in existing risk communication literature and field research provides numerous conclusions. Similarities can be found in each of the risk communication strategies that have been identified in this paper. Some strategies focus on merely mentioning the risks, other strategies focus on providing how-to-act information that gives more insight in how the citizen should handle different crisis situations. Other strategies, as can be identified in the Dutch 'Denk Vooruit' campaign, tend to less effective. A negative pattern can be detected between the strategies that provide one-way information that is also integrated in the Denk Vooruit campaign. In the international context of risk communication, many literature can be found on what are effective risk communication strategies. The most significant result from the preliminary analysis is that the sender of risk communication should take into account the wants and needs of its target group. The theories on motivation and risk perception support that. Individuals tend to look for the information that they identify in relevant, and in terms of how it helps them in their daily lives.

7. Advice: 'The Dialogue'

7.1.   Introduction

The recommendations of this research are written for the Municipality of Meppel. Based on the outcomes of field research, major guidelines for a future risk communication campaign have been set. The guidelines are translated in six steps in a risk communication campaign which the Municipality of Meppel should follow. It is estimated that the risk communication campaign would have a one-year duration. This of course, can completely be decided by the Municipality of Meppel and can be shortened or extended, depending on the success of the risk campaign.

7.2.   **Step 1:** Conduct a Situational Analysis

The Municipality of Meppel has stated the need for change in its current risk communication strategies. In the base of the nature of the municipality, it is 'forced' to communicate about environmental risks due to the law. To be short and concise: the municipality currently has no clear strategy in the execution of risk communication. Risk communication practices have simulated that risk communication is compulsory, but in fact leads to small behavioural change. Information is not used, the government does not take the citizen seriously or the citizen does not take the government seriously. Citizens have indicated to be worried about risks, because they have never received information about that. Insight in risk communication strategies prove that providing one-way information about risks simply does not work, or does not reach its full potential as how-to-act knowledge is kept aside.

In the first step, before initiating any risk communication, the municipality should map the environmental risks that are active in the province. It is of no use to communicate about all risks in the municipality, but the most significant ones should be selected. The environmental risks that came to front in the field research, were mostly fires and the transportation of chemical goods in the city. Citizens mentioned their fear of possible accidents with the trains that transport the chloric trains. The focus should always be on the citizen. What does the citizen already do to increase its own risk preparedness? The goal of the new risk communication campaign should be about bridging that gap and connecting the wants and needs of the citizen to the interest of the municipality. Many insights in effective risk communication strategies all lead to three important aspects in risk communication: **Transparency, honesty and trust.** These three words are the formative base of effective risk communication and are taken into account in this advice. For the first step in this risk communication strategy, it is very important to notify individuals about the fact that they are at risk every day. The municipality does not want to use fear appeal, so the message could be translated in simple messages such as 'wat do you do?'. The message should however clearly relate to how individuals treat risks in their environment.

Cooperate with local institutions

Essential in the first step of the preparation phase of the risk communication campaign is to initiate communication with the organizations and businesses in the region that are involved. The stakeholders of the Municipality are numerous, and many individuals have individual wants and needs, or desires in

receiving information. To make sure all wants and needs are taken into account, it is important to communicate with stakeholders from the very beginning. Map the different wants and needs and state common interests. There are numerous factories in the city that produce and transport chemical goods and substances. Currently, there is no communication about that. It would be sensible to connect with these factories and check in what manner cooperation is possible. It could be that the factories in Meppel are not even aware of, for instance, the website Risicokaart.nl. They can be informed about this and be updated about the new initiatives on risk communication. Besides facilitating dialogue between stakeholders, this initiative is also important as it can save time in the future. When communicating with stakeholders early, it can save time because else stakeholders should be informed afterwards. Possible questions may come up, and when initiating communication with stakeholders beforehand, those questions are taken away in some form.

- **What:** Connect with stakeholders after the risk-mapping and start a dialogue about what environmental risks affect them and what the government already does to prevent risks from evolving into crises.

- **How:** Initiate communication with the so-called intermediaries. The intermediaries are organisations that in some way stand close to citizens. These are institutions where citizens get together and unite. The institutions can actively provide the information to their visitors. Also, press releases can be send as well as an official announcement by the mayor.

- **Who:** Schools, cultural institutions, factories and companies that are mentioned on Risicokaart.nl.

- **When:** At the start of the risk communication campaign. Risk mapping: (*1 month*). Initiating communication with stakeholders; (*1 month).*

7.3.   **Step 2:** Attend to available information

After the environmental risks in the Municipality of Meppel have been identified, the municipality can form the main message of the risk communication campaign. The Municipality of Meppel should take into account that excessive material about risks is available online, set-up by experts of the Ministry of Safety and Justice. The information can be found on one primary website: crisis.nl. The simple message in Dutch 'wees voorbereid' seems to be rather unsuccessful, because it does not provide suggestions. The Municipality of Meppel could think ahead themselves, and treat the citizen as a fully-fledged communication partner. The Municipality of Meppel should consider to use its reputation through the development of several communication materials. More specific, the campaign should focus on the initiatives that the municipality takes to guarantee citizen safety. The long and grey policies of the Municipality of Meppel, that is normally relatively unattractive to read for the general citizen, could be translated into short informative messages that inform the citizens about what the municipality has done so far to guarantee citizen safety. "We connect police and fire department", "So you call whenever there is danger".

Use an informative appeal

Before the research was initiated, the Municipality stated to have negative experiences with the use of fear appeals. The fear appeal therefore will not be considered, but luckily there are other options. The primarily function of new risk communication is to provide information. As simple as that. But how is the citizen going to accept the information? It seems as if the passive messages throughout numerous risk communication campaigns have led to passive outcomes. Moreover, the citizen in the core being, is an individual with interests. The municipality can look at what events take place in the region and connect to the ones that are most popular. Adapt the information to numerous settings. Keep notifying the citizen and make him or her go through a cognitive process. The Municipality of Meppel should guide the citizen all throughout the campaign. This could be simply divided in **one main campaign theme** with two different sections: "What does the municipality do and what do you have to do?".

Stick to what is legally obliged

Meppel as a municipality has financial obligations to higher organs, and has indicated that it wants to 'invest minimally with the focus on maximal outcomes'. In other words, the financial constraints do not allow a wide variety of new information to be produced. Luckily, sufficient information is available for the Municipality of Meppel to use. All of the information on crisis.nl can be used freely. The Municipality of Meppel only has to pay for the service of *crisis.nl* when they do not have sufficient capacity during times of crisis to provide citizens with information on their own website. After the law Wet Rampen en Zware Ongevallen has been lifted in 2010, the municipality cooperates with multiple institutions on informing citizens about risks. The municipality in some way has been relieved of burdens to inform citizens about all risks and can now focus on the risks that matter for the citizens. Which risks are real in Meppel and which ones can be communicated about? One of the multiple questions that the Municipality should think about when executing this risk communication campaign. It became clear that the most effective strategy is to focus on the environmental risks that matter to the citizens (which has been identified in step 1). Besides, the national government also executes risk communication campaigns. From an objective perspective, it can be said that the municipality should draw a clear line there. The municipality merely communicates about the risks that play a role in the environment. This however is not the case during crisis situations, or when so-called external crisis (*See: Paragraph 4.2.2.*)

Provide how-to-act knowledge

Citizens overall seem to appeal more to how-to-act knowledge. During the group sessions with the citizens of Meppel, it became clear that in general, the 'Denk Vooruit' campaign was not appreciated, but the accompanying flyer was very much appreciated. The citizens do not want to know the risks. The citizens want to know how they can respond to possible crisis situations. When there is fire, how do I as a citizen extinguish the fire? What do I need to do so? This situational thinking can be used and applied to numerous situations.

Pin down to the local culture

When communicating risks, the Municipality should anticipate to the local culture. The Municipality of Meppel, as an organization has the purpose to provide service to the citizens. The municipality does not only provide information, but helps citizens in practical situations, whenever someone needs a new passport for instance. For more initiative on risk communication, the municipality could connect to popular local events, such as the *Donderdag Meppeldag*en (Translated: Thursday Meppel-days). These days, where citizens unite to celebrate the local culture, the Municipality of Meppel could provide risk communication as well. Here, the transparent dialogue comes in as well. Through the handout of flyers with how-to-act knowledge, the municipality could start the dialogue.

> **What:** Introduce existing risk information retrieved from Crisis.nl, translated to the local culture and displayed in the house-style of the Municipality.
>
> **How:** Display the information during local events through banners and flyers. Also, the information is spread on social media channels of the municipality.
>
> **Who:** The Municipality and accompanying organizations who organize events
>
> **When:** When the messages and content of the campaign has been determined.

7.4.   **Step 3:** Listen to the public

Citizens decide which information they attend to and when they will attend to new information. Selective exposure seems the main guidance for individuals when attending to messages. The Municipality of Meppel can take this information into account throughout its risk communication campaign by following the citizen. As multiple risk communication professionals stated in the field research: be where the citizens are. Do not merely inform. The time of transmissional communication is over, the era of interactive communication has begun. The average citizen (not taking into account minorities), in the year of 2016 is active online and uses multiple social media channels.

Use topicality as the main message guide

Another market on a regular Sunday, a nice sunny day in the city centre where citizens get together, or the complete opposite: a stormy rainy day in December full of thunderstorms. Things like this can happen. As the preliminary research indicates, possible crisis scenarios are not interesting for the citizen. Anything could happen. It needs to become more feasible for the citizen. The citizen wants to see the risk with its own eyes and anticipate to it. The scenarios sketched in the beginning of this paragraph are real to the citizen. Possible bomb explosions in the city centre of Meppel (that is not an interesting location to bomb for a terrorist in the first place) is not a feasible threat for the average inhabitant of Meppel.

Use and build trust

The risk communication professionals who have attributed to the findings of this research and who gave their opinions, stated that risk communication should come from a credible source. The municipality should remember that in some way it has built trust already, since the existence. The municipality as a governmental institution already carries a certain trustworthy image. The municipality could integrate

some sort of safety-mark in its policy. The municipality has already taken numerous initiatives to ensure citizen safety, but the Municipality of Meppel still remains in the background. A new safety-mark could be integrated in the future risk communication campaign and place the Municipality of Meppel more to the foreground. The mark could 'convince' citizens, anywhere anytime. The citizen, when he or she, sits on a terrace, sees the mark and would receive some sort of safety feel. QR codes could be used as an addition to provide more information about the location where the citizen is and how the area is reviewed in terms of safety. Then, the dialogue between the Municipality of Meppel and the citizen of Meppel is still being made. The Municipality communicates trust to the citizen. The citizen may or may not be interested in the information, but it would be unlikely that the citizen gains more distrust towards the municipality after seeing the mark.

The concept of the mark could be developed more throughout the risk communication campaign of the municipality. After a certain period of the introduction of the mark, there is a possibility that people will recognise the mark and want to have it. This, of course, would be the ideal situation.

An important target group that should be treated with high respect all throughout the campaign are less self-efficient individuals. These individuals can be inhabitants of day-care and elderly institutions. These type of public spaces require different content than in step 1. The municipality should organize meetings that take place in the form of an information session. The municipality then also has the opportunity to provide the participants with flyers, brochures and other accompanied material which the municipality chooses.

> **What:** The introduction of significant trust marks by the Municipality of Meppel, integrated in the corporate colours of the municipality.
>
> **How:** By connecting with the stakeholders, who have been contacted in the beginning of the risk communication campaign.
>
> **Who:** The communication department of the Municipality of Meppel and involved stakeholders.
>
> **When:** In the main process of the risk communication campaign. The duration can be determined by the Municipality.

7.5.   **Step 4:** Use existing communication channels

The Municipality of Meppel has lots of potential in its existing communication channels. Using existing communication channels and optimizing them would fit in the Municipality's desire to reach maximal outcomes with minimal incomes. When initiating a new risk communication campaign, the most suitable communication channels are as follows:

- **Website:** Risicokaart.nl and the main website of the Municipality. Within the risk communication campaign, the municipality should integrate a mix of channels in order to reach full effectiveness of the campaign. The citizens who have participated in the group sessions, during the field research stage of this research, have indicated that they like the way Risicokaart.nl works, but that they were fully unaware of the existence of the website. This website also is full of potential and is

up-to-date in terms of risks. In other words, the risks in the environment have been visually elaborated already. The Municipality should consider to integrate Risicokaart.nl in its risk communication campaign, due to its functionality.

- **Social media:** Both Facebook and Twitter is used to communicate the content of the risk communication strategy. During the risk communication campaign, the municipality should increase its monitoring activities and keep the information on both channels up-to-date.

- **Printed media:** Many citizens that have participated in the field research have stated their preference in printed media. According to them, the local newspaper is extremely popular. The Municipality should therefore integrate the newspaper in the multi-channel strategy. Besides the regular printed media, the municipality already has its own brochure that is released every year. The brochure should also provide information about the new risk communication campaign.

- **Press releases:** Just as important as it is to initiate dialogues between the municipality and its internal stakeholders, it is also important to initiate dialogues with the external stakeholders of the municipalities. Think of other Safety Regions, experts in the field, journalists and companies that trade with Meppel but that are not located in Meppel. Through the use of press releases, information can be distributed to them in a professional manner. Press releases can also take place at an earlier stage, for instance in the beginning of the risk communication campaign. The content of the press releases can be varied, but the main focus is on providing insight in the risk communication campaign, by mentioning the main message and channels used.

  What: Communication risk-related messages through existing communication channels

  How: By using a mediated communication channel mix of existing and cost-efficient communication channels that are already in use by the Municipality of Meppel

  Who: The communication department of the Municipality of Meppel

  When: In the main phase of the risk communication campaign (Month 3-9). Repetition of material collected begins after month 9.

Important in this step is the repetition of material produced. Repetition of information leads to more efficient risk communication campaigns and more desirable outcomes, as was concluded from the analysis of preliminary existing literature and the execution of opinion research.

7.6.   **Step 5:** Evaluation

Throughout the research process, it became clear that the citizen panel that the Municipality of Meppel currently uses to test new implications with its citizens, can be used as an important tool in future research as well. It is advised that the municipality keeps researching the effectiveness of its risk communication strategies, through the use of online surveys that are distributed among citizen panels. Also, the municipality could use its existing communication channels once again. Especially the social media channels provide numerous opportunities for the evaluation of risk communication initiatives. The

Municipality should consider sharing online surveys through Facebook and Twitter. The communication campaign 'what does the government do and what do you do' is an example formed for this research and

What: Evaluating risk communication initiatives after the campaign has ended.

How: Through fully utilizing the existing communication channels and the website of the municipality to collect feedback on the risk communication campaign.

Who: The communication department of the Municipality of Meppel.

When: Month 10-12.

7.7.   **Step 6:** Maintain dialogue

The risk communication strategy does not come to an end after the campaign has ended. After the evaluation of the campaign, it is crucial to maintain dialogue with the citizens. It not only provides the citizens with the opportunity to give their opinion on the material received during the campaign, but it is two-way communication in its purest form. Throughout this research, it became clear that effective risk communication is built upon two-way communication.

What: After the evaluation of the campaign,

How: Through the municipal website of the municipality and through its social media channels.

Who: The communication department of the municipality.

When: Month 12+.

7.8.   Planning and milestones

It is assumed that the risk communication campaign is executed over the course of twelve months. Of course, the Municipality of Meppel can choose freely to what extent it wants to execute the campaign and whether a follow-up campaign with similar content is initiated. It is also assumed that the campaign starts in January.

'What does Meppel do and what do you do?"

Step	Message	Channel	Evaluation	Milestone	
1: Situational Analysis	For instance: *"The municipality connects with its stakeholders, do you connect with us?"*	All existing communication channels used by the Municipality of Meppel	- Through observations of stakeholder interests and reporting	**Milestone 1:** Initiate personal communication with all internal stakeholders Deadline: February 28th, 2017.	**Month** 1-2

2: Attend to available information	For instance: ''	All existing communication channels used by the Municipality of Meppel	- Through observations and reporting	**Milestone 2:** Translate all how-to-act national expert information to local environmental issues <u>Deadline: March 30th, 2017.</u>	3-4
3: Listen to the public	For instance: *"Meppel informs its citizens, will you inform us?"*	All existing communication channels used by the Municipality of Meppel	- Outcome evaluation	**Milestone 3:** Translate one actual topic into risk communication content on a environmental risk <u>Deadline: May 30th, 2017.</u>	4-5
4: Make use of existing communication channels	For instance:	All existing communication channels used by the Municipality of Meppel	- Process evaluation and cost-effectiveness evaluation	**Milestone 4:** Translate three actual topics into risk communication content on an environmental risk <u>Deadline: Augsust 31st, 2017.</u>	6-10
5: Evaluation	For instance: *"Meppel has put significant effort in enlarging your safety. What have you noticed?"*	All existing communication channels used by the Municipality of Meppel	- Impact evaluation through online surveys	**Milestone 5:** The majority of the respondents questioned in the evaluation research indicate that they have perceived the information provided as helpful <u>Deadline: December 31st, 2017.</u>	10-12
6: Maintain dialogue	For instance:	All existing communication	- Needs assessment	**Milestone 6:**	12 >

	"How do you experience your personal safety at this moment?"	channels used by the Municipality of Meppel		The majority of the responses on social media are positive after the finalization of the campaign Deadline: June 2017	
				Total cost estimation: max. €5000.	

<div align="center">Figure 5: Planning of the advice</div>

7.9.   Possible barriers

The largest barrier of this advice which is translated into the base for risk communication campaign, of course would be that any sort of crisis evolves during the running of the campaign.

Another possible barrier of this campaign could be that other risk- or crisis communication campaigns initiated by the national government leads to contradictions in communication. Also, it is suggested that the municipality conducts a short research on the different wants and needs

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Appendix

1: Organizational analysis
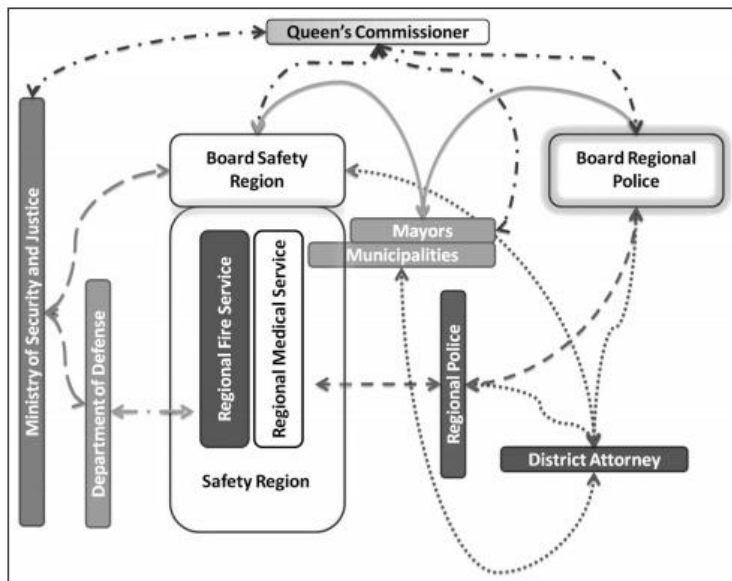
Figure 6: A Safety Region and its relationships in The Netherlands.

Source: Van Trijp et al. (2012)

The graph above describes the position of a safety region among its direct stakeholders. As can be seen, a safety region exists of regional fire services and regional medical services. These two institutions fall under the Safety Region. The Ministry of Security and Justice together with the Department of Defence are responsible for the system of crisis management- and control. These two stakeholders determine the guidelines for new crisis communication plans. On top of that, the Ministry has a control function and "tests the functionality of a safety region, a municipality or public organ which executes the preparation to crisis and disasters" (Regtvoort & Siepel, 2012, p.66). The VRD sees its vision as following: "The Veiligheidsregio Drenthe takes initiative during disasters or crisis, has the desire to increase awareness of physical safety of citizens and the Veiligheidsregio Drenthe is part of society (Taakstelling VRD, 2014). The mission of the Veiligheidsregio Drenthe can be described as following: "Guaranteeing citizen safety through craftsmanship, being responsible and act risk-oriented instead of rule-oriented and next to that, to be part of society and show involvement with stakeholders." (2014). Next to the standard goals that form the policy of the Veiligheidsregio Drenthe, a specific goal has been set. For 2018, the Veiligheidsregio Drenthe want to have developed a methodology for its services so that it meets the expectations of its citizens.

2: The Conceptual Model

This part of the appendix provides the key concepts that each clarify how the research questions will lead to the final communication advice. The key concepts form the main research topics of this research and are derived from the theoretical areas.

The Conceptual Model
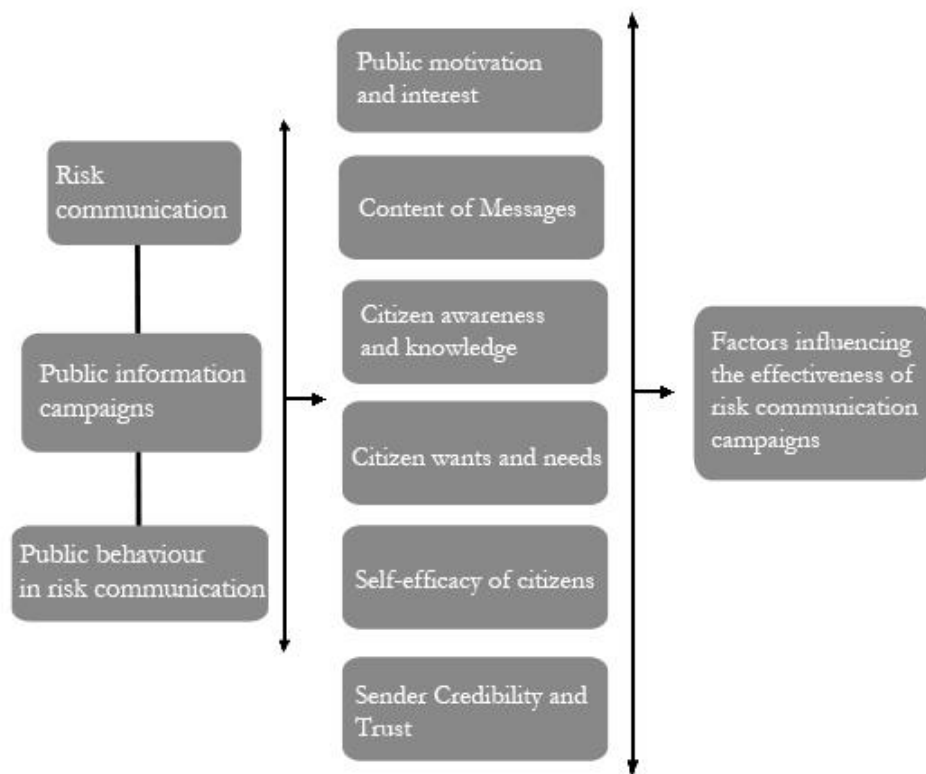
Figure 7: The Conceptual Model

The key concepts that have been identified can be found in the middle section of the graph above. These key concepts are connected as they are all factors that influence the effectiveness of a new campaign on risk communication.

3: The Research Planning

This part of the appendix provides an overview of the research planning, which can be seen below in Figure 3.

Figure 8: The Research Process Planning

Rough outline of the research schedule is as follows:

March		
7-11 March: Plan interviews with district directors and risk communication experts - Finishing problem context and organizational context - Meeting with Hanze University supervisor	**4-8 April:** Desk research on (Moment to check with Municipality of Meppel and the district platform)	**2-6 May:** Start with the advice and execution plan. Determine the most effective visuals and strategies plus justification. (Moment to check with Municipality of Meppel and the district platform)
14-18 March: Determining the research objective and research objects + Finishing theoretical framework + Finishing limitations of the research	**11-15 April:** - Elaborate the feedback in the research report	**9-13 May:** - Conclusion and start writing on advice on e.g. the most effective visuals.
Deadline 21 March: Hand in research proposal **21-25 March:** Desk research on international best practices in risk communication - Elaborate the outcomes in the research report	**18-22 April:** - Conducting the experiment and testing the different risk communication messages.	**16-20 May:** Last week of the research - Finishing evaluation plan - Writing the advice report (incl. advice on existing communication channels) - Last check of reports
28 March – 1 April: Contacting risk communication professionals to test the best practices and evoke opinion	**25- 29 April:** Processing research data and outcomes experiment / interviews	**Deadline 30 May: Hand in complete research and advice** **June 20-24th: Thesis Defence**

3: Personal communication initiated during the research process

3.1. Invitation to district citizen groups in Meppel

meppel.nl

Onderzoek Risicocommunicatie

'U weet toch ook graag wat de risico's in uw woonomgeving zijn?'

69% van de inwoners van Meppel gaf in het onderzoek 'de Veiligheidsmonitor' van 2013 aan zich niet bewust te zijn van mogelijke risico´s in hun woonomgeving.
61% zei dit wel graag te willen weten.

Gemeente Meppel geeft hier graag samen met u invulling aan.

Doet u mee?

Mag onze onderzoeker Stef Bandstra binnenkort langskomen bij uw wijkplatform, om met u te **brainstormen** over:

- *Welke riscio's kent u?*
- *Weet u wat u kunt doen als er iets gebeurt?*
- *Over wat voor soort risico's wilt u worden geïnformeerd?*
- *Welke kanalen/communicatiemiddelen hebben uw voorkeur?*

Hij neemt u op speelse wijze en met realistische voorbeelden mee in de wereld van **veiligheid.. dichtbij!**

Is uw interesse gewekt? Doe dan het volgende:

- Mail naar stef.bandstra@vrd.nl
- Of neem contact op met Stef via: 0642058916.

3.2. PowerPoint used during group sessions with citizens

Slide 1: Opening slide explaining research topic on citizen wants and needs in risk communication
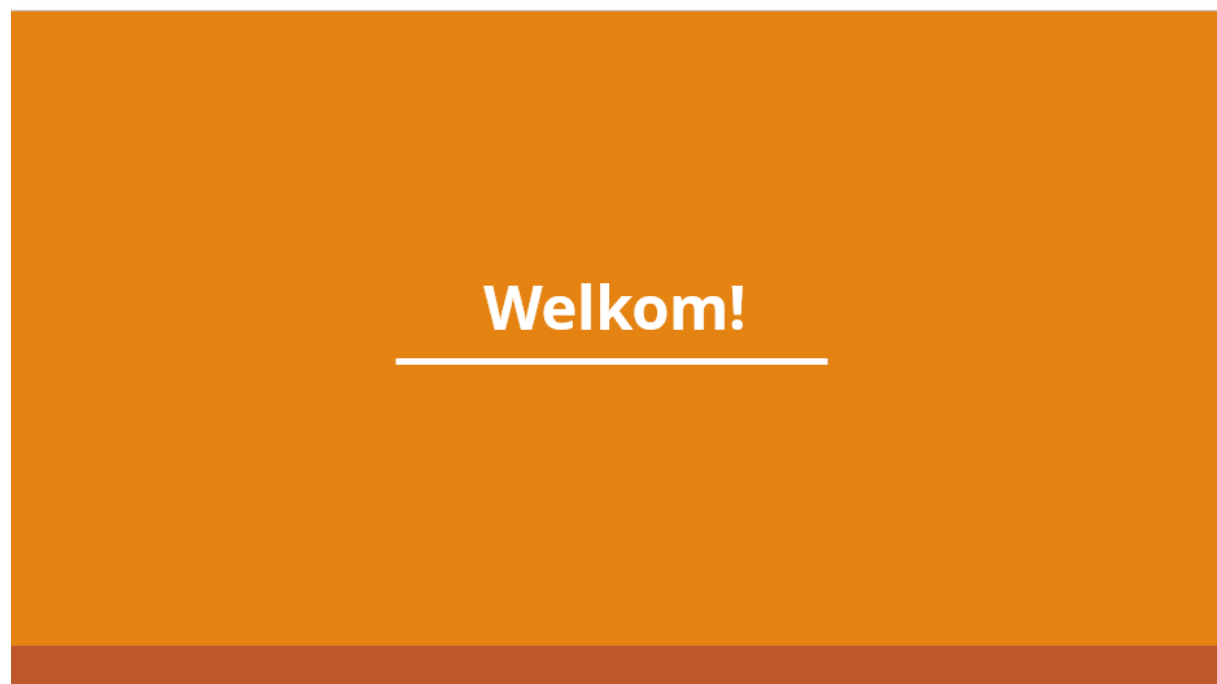
Slide 2: Welcoming slide and introduction of myself and colleagues

De Veiligheidsmonitor (2013)

69% van de inwoners van Meppel gaf in het onderzoek
'de Veiligheidsmonitor' van 2013 aan zich niet bewust te zijn
van mogelijke risico's in hun woonomgeving.
61% zei dit wel graag te willen weten.

Slide 3: Welcoming slide and introduction of myself and colleagues

Wat is risicocommunicatie?

Risicocommunicatie:

Het geven van informatie over risico's in de omgeving en over wat men kan doen bij een mogelijke crisis.

Slide 4: Explanation of risk communication

Video

https://www.youtube.com/watch?v=PsfmKgG1Hrc

Slide 5: Video of Dutch risk communication expert Ira Helsloot, explaining how risk communication is organized in The Netherlands (https://www.youtube.com/watch?v=PsfmKgG1Hrc)

Wat is zelfredzaamheid
precies?

Slide 6: Discussion on how the citizens perceive self eficacy and related questions about what they think they need from the Municipality of Meppel to be fully self-efficient during crises

Risicocommunicatie en u

Slide 7: Questions related to citizens and their needs in risk communication

Slide 8: Discussion of existing material, in this slide the website Risicokaart.nl was discussed, and to the extent in which the citizens perceive the website as relevant

Slide 9: Discussion of existing risk communication campaigns. In this slide, one of the flyers in the Dutch *Denk Vooruit* (Think ahead) campaigns was discussed.

Slide 10: Discussion on what could be improved in current risk communication, and what material the citizens would prefer to see instead

Vervolg van de groepssessie

Slide 11: Explanation of the research process and dates of end results. If the citizens prefer to receive summarized research results, they receive the opportunity to indicate that during this slide.

Suggesties en/of vragen

Slide 12: Final slide in which the citizens are given the opportunity to ask related questions and give suggestions, for instance for possible missing topics.

3.4. Qualitative survey questions for risk communication experts

Vragenlijst 'optimale risicocommunicatie'

Introductie

Mijn naam is Stef Bandstra. Ik ben vierdejaars student International Communication en momenteel voer ik mijn afstudeeronderzoek uit over de 'best practices' op het gebied van risicocommunicatie, voor de Veiligheidsregio Drenthe, in opdracht van de Gemeente Meppel. In deze vragenlijst vindt enkele vragen die aansluiten op het onderwerp.

Hartelijk dank voor uw deelname!

1. Wanneer is risicocommunicatie effectief of succesvol?

   ....
   ....
   ....
   ....
   ....

2. Wie is volgens u de meest geschikte afzender van risicocommunicatie?

   o Overheid landelijk

   o Gemeente

   o Anders, nl: ....

3. Hoe draag je als overheid bij aan een vergrote zelfredzaamheid van burgers?

   ....
   ....
   ....

4. Welke strategie werkt volgens u het beste bij risicocommunicatie?

   ....
   ....
   ....
   ....

5. Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in het buitenland?

----

6. Wat werkt volgens u juist niet bij risicocommunicatie?

----

7. Heeft u hier wellicht ook een voorbeeld van (in het buitenland?)

----

8. Voor dit onderzoek zijn er interviews gehouden met inwoners van de Gemeente Meppel. Een meerderheid geeft aan dat ze over specifieke risico's die in hun omgeving spelen informatie willen ontvangen, en over overige risico's juist niet geïnformeerd willen worden. Hoe valt dit volgens u te verklaren?

----

9. Welke risico's komen in het bijzonder in aanmerking voor risicocommunicatie?

----

10. Wat heeft uw voorkeur en waarom: één communicatieboodschap voor alle risico's of aparte campagnes voor verschillende soorten risico's?

----

11. Wat vindt u de meest geschikte kanalen/communicatiemiddelen voor
risicocommunicatie?

----

12. Op welke manieren kan de overheid risicocommunicatie meer interactief/tweezijdige
communicatie maken?

----

13. Indien bekend, wat vindt u van *Risicokaart.nl*? (verbeter)mogelijkheden ziet u?

----

14. Wat is uw mening over de *Denk Vooruit* campagne? Welke (verbeter)mogelijkheden ziet
u?

----

15. Bent u van mening dat informatie over omgevingsrisico's aangepast moet worden voor
anderstaligen? (toeristen etc.) Waarom wel/niet?
(Eén antwoord mogelijk)

o Ja, want:

----

o Nee, want:

----

o Ik weet het niet

o Anders, namelijk:

4: Qualitative results from citizen group panel sessions

Group session 1: Meppel Centre **– 4 participants – April 26th, 14:00, 2016**

Questions asked during the group session:

1. **What are your personal preferences in receiving information about risks in your direct environment?**

   Participant 1 (Male 1): *"I do not want to receive 16 different flyers about 16 different risks. Then that will lead to me still not being self-efficient during a crisis situation. The information should be short and precise."*

2. **On what kind of risks would you like to receive more information?**

   Participant 1 (Male 1): *"The information should guide me, but the information should be sent multiple times as well. I need a reminder else I won't do anything about it."*

   Participant 2 (Female 1): *"I would specifically like to know where the AED (automatic external defibrillator) is and where the closest one is."*

   Participant 2 (Female 2): *"I do not know that as well, I would really like to know that."*

3. **How should the information, from your perspective, in risk communication be?**

   Participant 1 (Male 1): *"The information should guide me, but the information should be sent multiple times as well. I need a reminder else I won't do anything about it."*

   Participant 2 (Female 1): *"Short and simple. I would like to know clearly what do when something happens."*

4. **What channels do you currently use to seek out information about risks in your direct environment?**

   All of the participants currently do not seek information about risks in their environment.

5. **What kind of channels would you prefer to receive information about possible environmental risks?**

   Participant 1 (Male 1): *'A mix of channels, preferably email and social media channels'*

6. **What is your impression of the *Denk Vooruit* campaign?**

   Participant 2 (Female 1):   *"I have the flyer that informs me about risks and how to act during these risks in my cupboard. But I feel like it is not up-to-date."*

7. **What do you think are the possible risks in your direct environment?**

   - *"Fires in the building I live"*

Group session 2: Haveltermade **– 11 participants – May 3rd, 15:00, 2016**

The group session was rather chaotic, therefore the participants are not separated but the most important comments mentioned during the session are readable below.

Questions asked during the group session:

1. **On what kind of risks would you like to receive more information?**

-   Most of the participants would like to receive information on the risks that are active in the environment.
-   One of the participants keeps mentioning the chloric acid trains that are active in the area.
-   All of the participants agree that the information should be repeated, and the time and amount of repetition depends on the government.

2. **What channels do you currently use to seek out information about risks in your direct environment?**

-   All of the participants currently do not seek out information about risks in the environment

3. **What kind of channels would you prefer to receive information about possible environmental risks?**

-   "The local newspaper"
-   Most participants wanted to see links between multiple types of channels
-   "The website of the municipality"

4. **What do you think are the possible risks in your direct environment?**

    The following risks were mentioned

-   The transportation of chemical goods
-   Large fires in large industrial organizations in Meppel

Group session 3: Nieuwveenselanden **– 7 participants – May 3rd, 19:30, 2016**

1 person filled in the Veiligheidsmonitor in 2013.

Questions asked during the group session:

1. **What are your personal preferences in receiving information about risks in your direct environment?**

Question from Participant 3: "What is a possible crisis?"

Response: *"Fire, explosions in your region, terroristic attacks you can think of those scenarios"*

Participant 1 (Male 1): *"I do not trust the government, I have had negative encounters with the government and do not trust the information they provide. I rather look for information myself."*

2. **What are your personal preferences in receiving information about risks in your direct environment?**

Participant 2 (Female 1): *"In my opinion, it is relatively simple to communicate risks to the citizens. So just do it. Then at least you did your task as a governmental institution."*

Question from respondent 3: '*"What does a crisis mean in risk communication?"*

Response by researcher: *"Fire, explosions in your region, terroristic attacks you can think of those scenarios"*

Participant 1 (Male 1): *"I do not trust the government, I have had negative encounters with the government and do not trust the information they provide. I rather look for information myself."*

Participant 3 (Male 2): *"Education or no education, it does not matter. If you have to keep thinking of risks all the time you do not have a life."*

Participant 4 (Female 2): "*I do not want to know anything about risks in my environment. I just want to know what I should do when anything happens. Now I do not know that, and I do not like the idea of that."*

3. **On what kind of risks would you like to receive more information?**

Participant 4 (Female): *"I would like to receive information on the risks that are active in my environment."*

Participant 4 (Female 2): "*None. It would make me crazy and I do not want to worry about that the entire day. The municipality could better provide me with practical information"*

Participant 1 (Male 1): "*I want to know what is going on in my environment, so the government should inform me about that."*

Several extra answers given later in the session:

- "Things that you cannot see"

- "The transport of gasses"

- "Chemicals"

4. **How should the information, from your perspective, in risk communication be?**

Participant 1 (Male 1): *"Clear. I just want to know what do to when something happens."*

Participant 2: (Female 1): *"It should be clear, applicable to each different situation that occurs."*

Participant 2: (Female 1): *"The most perfect thing would be something like the Risicokaart, something that I am referred to multiple times through multiple channels so that it keeps reminding me."*

Participant 2: (Female 2): *"Yes indeed, but then for all the people in the same postal code who live in the same region."*

5. **What channels do you currently use to seek out information about risks in your direct environment?**

All of the respondents do not currently seek out information about risks in their environment.

6. **What kind of channels would you prefer to receive information about possible environmental risks?**

Participant 4: (Female 2): *"I like the way NL-Alert works, I want to receive it in my mobile phone."*

Participant 1 (Male 1): *"I prefer through mail"*

Participant 2: (Female 1): *"I would like to receive crisis information on my mobile phone, but information about risks in my environment through internet". "But if as a government you make sure to use multiple channels, everyone can get to the information."*

"The risk information could be provided on Facebook, a lot of my friends use that so it catches my attention"

-   It was mentioned that it would be a good idea to apply for a service and receive information about it

7. **What is your impression of the *Denk Vooruit* campaign?**

7 of the 8 participants have never seen the flyer. 1 participant has the flyer in the part of the house where the gas installation is.

8. **What would motivate you to seek out information on risks in your environment?**

Unified answer: Nothing. Some participants at the group session are aware risks. One risk was mentioned: transport of chemicals.

9. **Do you think that information about risks in the direct environment of Meppel should be translated to different cultures? For instance, for tourists and visitors? Why (not)?**

Participant 1 (Male 1): *"It cannot cause any harm to translate risk communication."*

Participant 3 (Male 2): *"If it is optional to choose multiple languages, it indeed cannot cause any harm to translate the information."*

Group session 4: **Nijeveen (village above Meppel) – 3 participants – May 11th, 20:00, 2016**

1. **What are your personal preferences in receiving information about risks in your direct environment?**

   Participant 1 (Male 1): *"I want to receive specific information on how to handle during a crisis situation."*

   Participant 2 (Male 2): *"I just want to know what to do, for instance when there is a flood."*

2. **On what kind of risks would you like to receive more information?**

   Participant 1 (Male 1): *"Nothing. Only when it happens"*

   Participant 2 (Male 2): *"Nothing. Only when a crisis situation occurs"*

   Participant 3 (Female 1): *"That depends on the risk, I prefer specific information on the ones that can affect me physically."*

3. **How should the information, from your perspective, in risk communication be?**

   Participant 1 (Male 1): *"Clear and instructive."*

   Participant 2 (Male 2): *"The municipality should take full responsibility for providing information and this should be very practical."*

4. **What kind of channels would you prefer to receive information about possible environmental risks?**

   Participant 1 (Male 1): *"Flyers. But also social media and some sort of text message"*

   Participant 2 (Male 2): *"You should put it in the local newspaper here in Nijeveen, it only comes every two weeks but everybody reads it. Guaranteed."*

   Participant 3 (Female 1): *"The website of the municipality"*

4: Qualitative survey results from risk communication experts

4.1.   Risk communication expert 1: Floor de Ruiter

1.   Wanneer is risicocommunicatie effectief of succesvol?

- Met minimale interventie maximaal effect
- Als het vertrouwen daardoor toeneemt

2.   Wie is volgens u de meest geschikte afzender van risicocommunicatie?

o Overheid landelijk

o Gemeente

o Anders, nl: Beide, afhankelijk van type risico

3.   Hoe draag je als overheid bij aan een vergrote zelfredzaamheid van burgers?

- Dialoog aangaan met burgers op basis van gelijkwaardigheid; niet top down informeren

4.   Welke strategie werkt volgens u het beste bij risicocommunicatie?

- Aansluiten op de beleving van de luisteraar. Voor de VRU (en bijvoorbeeld gemeente Zwolle) hebben we een indeling van 4 niveaus bepaald: 1. (blauw) de overheid is eigenaar van het probleem (bijvoorbeeld wegennet) en informeert te burgers; 2. De overheid en burger staan in onderhandelingsrelatie (oranje) bijvoorbeeld samen festival organiseren etc. over de uitvoering etc. onderhandelen, 3. (groen) draagvlak; burger en overheid hebben gemeenschappelijk belang (inrichting van een park) maar moeten in consensus tot besluiten komen, inclusief optreden bij risico's en 4 (geel) de overheid is eigenlijk geen partij (waarbij de overheid de dialoog kan faciliteren) overleg voorzitten hoe festivalorganisatoren samenwerken om zich op risico's voor te bereiden.

5.   Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in Nederland?

- Amsterdam, omgaan met de kindermisbruikzaak (Robert M.), excellent voorbeeld omdat voor het eerst in het proces de belangen van de ouders werden afgewogen tegen belangen van OM en politie. De belangen van ouders gingen voor en dat pakte erg goed uit. Overigens werd daarbij geleerd van zaak van Benno S in Den Bosch; het team van burg van Den Bosch reisde direct af naar Amsterdam om *'the lessons learned'* te delen.

6. **Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in het buitenland?**

   - Nee.

7. **Wat werkt volgens u juist niet bij risicocommunicatie?**

   - Proberen je schuld weg te framen, niet eerlijk zijn, eigen belang duidelijk laten mee wegen, burgers niet serieus nemen

8. **Heeft u hier wellicht ook een voorbeeld van (binnen- of buitenland?)**

   - Bush communicatie rondom orkaan Catarina in New Orleans was catastrofaal slecht (nog steeds)

9. **Moet risicocommunicatie gaan over risico's in de directe (woon)omgeving, algemene risico's of beide, en waarom?**

   - Allebei

10. **Wat heeft uw voorkeur en waarom: één communicatieboodschap voor alle risico's of aparte campagnes voor verschillende soorten risico's?**

    - Uitgaan van het perspectief van de burger, wat hij als risico ervaart, niet uitgaan van de inhoud of efficiency

11. **Wat vindt u de meest geschikte kanalen/communicatiemiddelen voor risicocommunicatie?**

    - Dialoog online en dialoog live; dat is de combinatie

12. **Op welke manieren kan de overheid risicocommunicatie meer interactief/tweezijdige communicatie maken?**

    - Lees het boek: Crowdocraty (Iman Stratenus)

13. **Indien bekend, wat vindt u van _Risicokaart.nl_? welke (verbeter)mogelijkheden ziet u?**

    - Dit hoort bij blauwe communicatie; informeren dus alleen geschikt voor die situaties

14. **Wat is uw mening over de *Denk Vooruit* campagne? Welke (verbeter)mogelijkheden ziet u?**

In de beleving van burgers zijn mogelijk bedachte rampen niet relevant. Heeft dus nauwelijks zin maar wat belangrijk is, is on line direct bij een ramp de dialoog aan gaan.

15. **Bent u van mening dat informatie over omgevingsrisico's aangepast moet worden voor anderstaligen? (toeristen etc.) Waarom wel/niet?**

○ Ja, want: Zie de case met witte heroïne in Amsterdam, dat was alleen maar een internationaal probleem. Er waren geen Nederlanders bij betrokken. Wederom, ga altijd uit van je doelgroep, dus alles moet in het Engels vertaald worden.

4.2.   Risk communication expert 2: Gert Klooster

1.   Wanneer is risicocommunicatie effectief of succesvol?

- Als de informatievoorziening er aantoonbaar toe heeft geleid dat de schade (aanzienlijk) is beperkt (of is voorkomen) en betrokkenen zich daadwerkelijk aan het handelingsperspectief hebben gehouden.

2.   Wie is volgens u de meest geschikte afzender van risicocommunicatie?

o Overheid landelijk

X Gemeenten / Veiligheidsregio (want: het dichtst bij de betrokkenen)

o Anders, nl:

…………………………………………………………………………………………………

………………...

3.   Hoe draag je als overheid bij aan een vergrote zelfredzaamheid van burgers?

- Door deze zelfredzaamheid te (laten) organiseren, faciliteren en in te zetten in de communicatieboodschap / het handelingsperspectief.

4.   Welke strategie werkt volgens u het beste bij risicocommunicatie?

- Tijdige en transparante informatievoorziening, met name over maatregelen die schade beperken, juiste betekenisgeving (en bestuurder positioneren als burgervader/boegbeeld/beslisser), en duidelijk handelingsperspectief schetsen (bij diverse scenario's, op korte en lange-re- termijn).

5.   Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in Nederland?

- Meer in zijn algemeenheid: de gekozen structuur (Grip 1, 2 3 en 4) en de wijze waarop dit (door Veiligheidsregio's/ gemeentelijke kolom) wordt uitgevoerd, getraind en in opleidingen en oefeningen wordt ingezet.

6.   Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in het buitenland?

- In mijn geval: het veiligheids- en ontruimingsplan tijdens het WK voetbal 2006 in Duitsland

7.   Wat werkt volgens u juist niet bij risicocommunicatie?

- Dat niet-autoriteiten gaan communiceren (of ongevraagd ingaan op geruchten) over slachtoffers, oorzaken, gevolgen, scenario's en schadebedragen en zodoende die schade, maatschappelijke onrust en chaos vergroten in plaats van beperken. M.a.w.: er moeten geen meerdere bronnen zijn. Overigens werkt het ook niet als autoriteiten niet of te laat informeren, of geruchten ontkrachten.

8.   Heeft u hier wellicht ook een voorbeeld van (binnen- of buitenland?)

- Gelukkig geen hele erge voorbeelden.

9. **Moet risicocommunicatie gaan over risico's in de directe (woon)omgeving, algemene risico's of beide, en waarom?**

- In eerste instantie (en zeker in een uitvoeringsfase) over de directe woonomgeving van directe betrokkenen, maar in de strategie (en in de preparatie- en nazorgfase) ook over meer algemene risico's op langere termijn. Waarom: in beide gevallen om het juiste handelingsperspectief (en wellicht genomen maatregelen) te communiceren.

10. Welke risico's komen in het bijzonder in aanmerking voor risicocommunicatie?

- Risico's die de openbare orde en veiligheid kunnen aantasten, met name (natuur)rampen, ernstige ongevallen, (vormen van) terrorisme e.d.

11. **Wat heeft uw voorkeur en waarom: één communicatieboodschap voor alle risico's of aparte campagnes voor verschillende soorten risico's?**

- Dat hangt af van de aard van het risico en de aard van de crisis. Als alle risico's (a.h.w.) onder één noemer zijn te scharen, kunnen ze bondig worden gecommuniceerd (ramen en deuren dicht, sta hulpverleners niet in de weg e.d.). In de preparatiefase werken aparte campagnes voor verschillende soorten risico's goed.

12. **Wat vindt u de meest geschikte kanalen/communicatiemiddelen voor risicocommunicatie?**

- Persverklaring/conferentie, sociale media en website(s).

13. **Op welke manieren kan de overheid risicocommunicatie meer interactief/tweezijdige communicatie maken?**

- Met name door omgevingsanalyses te benutten, d.w.z. het sentiment op sociale media te volgen en te reageren op vragen.

14. **Indien bekend, wat vindt u van *Risicokaart.nl*? welke (verbeter)mogelijkheden ziet u?**

- Informatief, maar bewerkelijk.

15. **Wat is uw mening over de *Denk Vooruit* campagne? Welke (verbeter)mogelijkheden ziet u?**

- Informatief en bruikbaar in de preparatie. Ervaring leert echter dat mensen er niet als eerste naar grijpen bij een crisis.

16. **Bent u van mening dat informatie over omgevingsrisico's aangepast moet worden voor anderstaligen? (toeristen etc.) Waarom wel/niet?**

- Hangt af van de aard van de situatie: in de preparatiefase kan het anderstalig worden gemaakt (als blijkt dat zich in een omgeving veel anderstaligen of toeristen bevinden). In een crisissituatie kan het (alleen in een specifieke situatie met veel anderstaligen of toeristen) helpen bij zelfredzaamheid / handelingsperspectief / betekenisgeving.

4.3.   Risk communication expert 3: Roy Johannink

1.   Wanneer is risicocommunicatie effectief of succesvol?

- Als de ontvanger (diegene die blootstaan aan het risico) zich realiseert dat een risico zich kan voordoen, en/of zich realiseert dat een risico bepaalde gevolgen met zich meebrengt.

2.   Wie is volgens u de meest geschikte afzender van risicocommunicatie?

o Overheid landelijk

o Gemeente

X Anders, nl: De partij die verantwoordelijk is voor het risico. Kortom: zo dicht mogelijk blijven bij de organisatie.

3.   Hoe draag je als overheid bij aan een vergrote zelfredzaamheid van burgers?

- Door aan te sluiten bij de capaciteit (vermogen om onveilige situaties aan te pakken) die burgers al bezitten. Niet betutteld, maar vooral kijken: wat doen mensen zelf al en waar kunnen we dat versterken?

4.   Welke strategie werkt volgens u het beste bij risicocommunicatie?

- Door aan te sluiten bij de capaciteit (vermogen om onveilige situaties aan te pakken) die burgers al bezitten. Niet betutteld, maar vooral kijken: wat doen mensen zelf al en waar kunnen we dat versterken?

5.   Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in Nederland?

- Lastig, ik denk dat het tijd is voor nieuwe strategie. Zie: http://www.frankwatching.com/archive/2015/10/06/risicocommunicatie-tijd-om-risicos-nemen/

6.   Heeft u een voorbeeld (of wellicht meer) van goede risicocommunicatie in het buitenland?

- Neem een kijkje naar het artikel.

7.   Wat werkt volgens u juist niet bij risicocommunicatie?

- Neem een kijkje naar het artikel.

8.   Heeft u hier wellicht ook een voorbeeld van (binnen- of buitenland?)

- OFFline Onderweg

9.   Moet risicocommunicatie gaan over risico's in de directe (woon)omgeving, algemene risico's of beide, en waarom?

- Beide, want het gaat er ook over om mensen bewust te maken van datgene wat ze buiten hun directe omgeving kunnen tegen komen. Denk aan negatieve reisadviezen in het buitenland. Blij dat dat er is.

10. **Wat heeft uw voorkeur en waarom: één communicatieboodschap voor alle risico's of aparte campagnes voor verschillende soorten risico's?**

- Dat verschilt per periode, per gebied, per persoon, per situatie.. Kortom: zoveel mogelijk aanhaken bij de dagelijkse situatie van mensen.

11. **Wat vindt u de meest geschikte kanalen/communicatiemiddelen voor risicocommunicatie?**

- Aansluiten bij de kanalen waar burgers zitten. Fish where the fish are. Dat kan het kinderdagverblijf zijn, de school of de voetbalclub. Of een huis-aan-huis-folder rondgebracht tijdens donkere dagen bij een niet-verlicht huis.

12. **Op welke manieren kan de overheid risicocommunicatie meer interactief/tweezijdige communicatie maken?**

- Monitoren op de risico's die mensen zelf niet direct als risico ervaren. Ga er eens het gesprek over aan. BBQ-en in de zomer. Wens mensen een goede BBQ met wat veilige BBQtips als ze Facebooken of Instagrammen over BBQ.

13. **Indien bekend, wat vindt u van _Risicokaart.nl_? welke (verbeter)mogelijkheden ziet u?**

- Afschaffen. Het voegt niets toe. Niemand leest het. En het is te betuttelend. Aansluiten bij de beleving (perceptie) van mensen.

14. **Bent u van mening dat informatie over omgevingsrisico's aangepast moet worden voor anderstaligen? (toeristen etc.) Waarom wel/niet?**

- Ja, want als ik in een nieuwe omgeving kom wil ik ook gewezen worden op de risico's als daar. Denk aan loszittende stenen op een zandpad of lawinegevaar. Dat mag dus ook in NL. Bijvoorbeeld in het bos of bij een meer, waar toeristen ook zich begeven.