International Cooperation of Emergency Services:

Limiting and Facilitating Factors between the Netherlands and Germany

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Abstract

**Purpose:** The purpose of this research was to explore the underlying factors of international cooperation of emergency services in the Netherlands and Germany. Through a review of theories related to knowledge and information sharing with a link to cultural settings, a theoretical basis for this research was formed. By approaching the research in this way it is thought of as by discussing knowledge sharing processes between organisations, factors may be discovered which might be influential on the international cooperative relationship.

**Method:** In relation to previous research, this study builds upon contextual distances (Dawes et al. 2012). The contextual distances have been examined through the use of a qualitative research design in which 10 professionals from the Netherlands and Germany in the field of international cooperation of police and security regions were interviewed. Data was analysed by a process of several coding rounds.

**Results:** The results show that there are four general categories with several subcategories which prove to be important within international cooperation of emergency services; communication (media, language, organisational procedures and culture), resources (technical, organisational and financial), organisational factors (operational, relational factors, geographical situation, political influence) and personal factors (intention and personal network). In addition, this research argues that influential factors on international cooperation can be seen as facilitating or limiting.

**Conclusion:** The main facilitating factors of international cooperation are the similarities in shared elements, geographical situation, personal intention and benefits which arise from the resources organisations have to offer each other. Problematic and limiting remain the factors related to communication such as the differences in culture, media and organisational procedures which have to be followed strictly in order to prevent misunderstandings from happening.
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1. Introduction

National borders often function as barriers, geographically, legally, linguistically but also psychologically. Citizens of the European Union and the Schengen area may not even notice crossing national borders if it were not for the signage next to the road indicating the end and start of a nation state’s territory. Due to the developments in communication and transport, borders have faded in many aspects. Not only for individuals, also for businesses borders have faded away. Doing business with an organisation from the other side of the world has become common practice and reaching out to these organisations is done by a few clicks on your computer or smartphone. However, there are still many trade barriers in existence which countries use in order to protect their internal markets. On the other hand, inside of the European Union, an extensive cooperation between twenty-eight sovereign nation states with one barrier-free internal market can be seen.

In the Netherlands it is often thought of as if we were one of the pioneers of European cooperation through the formation of the Benelux Union in 1944. This was a rather small scale union compared to the formation of the more extensive European Coal and Steel Community in 1951. Years later, in February 1992, the member states of the European Community signed a treaty in the city of Maastricht which meant the creation of the modern European Union and subsequently led to a single currency accepted by most member states. This treaty, in a way, exemplifies the further integration and cooperation between nation states on a wide-variety of affairs and formed the base of the European Union as we know it today.

Later on, in 2004, there was a proposition for a treaty concerning an implementation of a European constitution. However, the European constitution was denied by the French and Dutch populations in a referendum and subsequently the plans to continue with this treaty were abandoned. Following the failure of the European constitution, in 2007 the Treaty of Lisbon was accepted by the member states of the EU. This treaty contains article 222, which is concerned with national security and solidarity when a disaster strikes in a member state. A member state is able to
request help from another member state in order to assist in order to combat the effects of a
disaster or prevent disasters from happening (EU 2007).

This research is concerned with the cross-border cooperation between institutions
concerned with public safety, called ‘Veiligheidsregio’s’ in the Netherlands. ‘Veiligheidsregio’s’ can be
translated into security regions, and these institutions are concerned with safety relative to
emergency services. In addition, police regions are also considered in the research. The research is
focussed on the international cooperation between security regions in the Netherlands and the
German state of North-Rhine Westphalia and to discover limiting and facilitating factors in this
cooperation. This specific area of international cooperation is a more localised cooperation due to
the way in which the security regions are structured in those two areas. The main question to be
investigated in this research is which factors are limiting or enhancing the international cooperation
between security regions from different nations.
2. Research Context

International cooperation on a more local level is already taking place for over half a century. Cooperation on a more local level is concerned with cooperation between smaller regions of countries, instead of cooperation on transnational levels. Most cooperation takes place inside so-called Euroregions, which are cross-border regions which seek the minimisation of international barriers, for business and for governmental institutions. In the Netherlands there are seven Euroregions which vary in scale. The first Euroregion in the Netherlands, the EUREGIO (Enschede – Gronau Euroregion), had been initiated in the year 1958 (EUREGIO 2016). This was fourteen years after the formation of the Benelux in London and just seven years after the treaty of Paris, which formed the European Coal and Steel Community. This indicates that regional areas of different nation states have been aware of the benefits that cooperating with their neighbours can have beneficial consequences. Besides this Euroregion, there are six other Euroregions in the Netherlands.

International cooperation on a Euroregional level does not only involve minimising barriers which might occur for businesses, but also involve cooperation between institutions. One of the institutions which are important for the well-being for the inhabitants in border regions is the cooperation between organisations involved with security, such as the security regions in the Netherlands and their counterparts in North-Rhine Westphalia.

All the Euroregions will share some risks that might pose a threat to the general public in the region. In the south of the Netherlands, there are various airports located just across the border such as Geilenkirchen NATO airbase, Weeze-Düsseldorf Airport and Maastricht-Aachen Airport. In addition there are also various natural parks which are located right on the border and which may require international cooperation when a wildfire develops. Furthermore, the river Rhine and Ems, motorways (A1, A12, A67, A76 etc.) and international railway crossings are important transportation routes which are accompanied with the transportation of chemical substances and also accidents between several vehicles can happen. Lastly, there are industries located in border regions which
may have an impact on the public health in neighbouring countries. It is also possible that a relatively small fire has an impact across the border, just think about the release of asbestos particles into the air.

There are many examples of foreign emergency services cooperating in order to combat a fire or transport victims to hospitals. During the Enschede fireworks disaster in 2000, German emergency services cooperated with the Dutch emergency services in order to limit the effects of the disaster. Also in the Dutch city of Kerkrade, where a truck crashed into a shop in 2004, an example of how the emergency services cooperate with their colleagues across borders can be seen (ANP 2005). However, there are also examples that the communication between security regions does not always go as smooth as it appears in the media. In November 2015 there was a fire on the premises of Chemelot, a chemical industrial plant in the south of the Netherlands during which several majors of neighbouring municipalities, across the border but also inside of the Netherlands, expressed their concern about the communication of information towards them (NOS 2015, HBVL 2015).

What makes it interesting to investigate the level of willingness to share information and knowledge is the number of security regions that share a border with a security region based in another country. In the Netherlands there are twenty-five security regions of which twelve share a border with another nation and thirteen are located in the territory of a Euroregion, which will be discussed later on. Dutch security regions exist out of all municipalities part of a certain region, the mayors from these municipalities are members of the institutional board of the security region they are located in. In addition, when needed, other institutions or government officials can be asked for advice or to join meetings of the board. The security regions hold responsibility over disaster management, crisis control, fire safety services, public health services and control rooms (Ministerie van Veiligheid & Justitie 2013).

The German structure provides an extended level of autonomy for the federal states under a nation-wide civil protection and disaster law. In the German federal state of North Rhine-Westphalia
the law ‘Gesetz über den Brandschutz, die Hilfeleistung und den Katastrophenschutz’ states that municipalities and the districts they are located in have responsibility to various extents. Municipalities hold responsibility over the fire safety and emergency rescue services (fire department and medical services), as long as it is an affair developing inside the territory of a municipality. Once the affected area gets larger, the districts get involved for having the same responsibilities as previously mentioned for municipalities. Districts also have responsibility over disaster management and crisis control, though the government of the federal state holds responsibility over central tasks related to disaster management, crisis control, fire services and emergency rescue services. The main difference compared to the Dutch structure is the difference in responsibilities between municipalities, districts, federal state and national government. In the Dutch structure the mayors of municipalities play a major role, this is less the case in the German system as districts have their own local government, chaired by the federal state (Niedersachsen 2012; Nordrhein-Westfalen 2015).
3. Theoretical Framework

The main question to be investigated in this research is which contextual distances are limiting or enhancing the international cooperation between security regions from different nations. By discussing knowledge sharing processes in and between organisations, factors are sought to be explored which may have an influence on international cooperation. In international cooperation, a shared situational awareness is important, especially linked to the organisations discussed in this research (Brown & Duguid 2001; Dawes et al 2012; Osterloh & Frey 2000; Seppänen et al 2013; Sonnenwald, Maglaughlin & Whitton 2004). The organisations in this research rely on an understanding of threats in order to effectively combat incidents, disasters and crises, through knowledge sharing they can create a better understanding of each other and intervene more effectively when incidents, disasters or crises strike, smoothing the cooperation. As this research is concerned with organisations from two different nation states, culture may have an effect on the cooperation and understanding as a whole. In relation to knowledge sharing, it is therefore also important to consider cultural influences in a knowledge sharing process as the cooperation examined in this research takes place on an international level (Gudykunst et al 1977; Jarvenpaa & Leidner 1999; Johnson, Lenartowicz & Apud 2006; Wiseman, Hammer & Nishida 1989). In addition, Dawes et al. (2012) identified several contextual distances which notes that from knowledge and information context, organisational context and national context, contextual distances can arise which may form barriers to the ability of organisations or individuals to understand and engage with each other.

3.1. Knowledge Sharing

Knowledge is often defined in various way, for this study we use the definition used by Bresman, Birkinshaw and Nobel (1999) who used Kogut and Zander (1992) describing knowledge as ‘the accumulated practical skill or expertise that allows one to do something smoothly and efficiently’ (Bresman, Birkinshaw & Nobel 1999, p. 444) (know-how) and is further extended with ‘know-what’ or information as it provides for a more wider interpretation of knowledge. Transfer is defined as
knowledge flowing ‘from the acquiring unit to the acquired unit; from the acquired unit to the acquiring unit’ (Bresman, Birkinshaw & Nobel 1999, p. 444).

Furthermore, knowledge is often discussed in two natures, tacit and explicit knowledge. Tacit knowledge is knowledge which cannot be transferred into words and made explicit easily, in addition it is not easily codifiable or communicated without the individual that holds the tacit knowledge. Explicit knowledge is a sort of know-how which is acquired through experience and is rather easily codified, stored, communicated and transferred (Ipe 2003).

Ipe (2003) further suggested four motivations for an individual to share knowledge with other parties, the first two motivations are internal factors and the last two motivations are regarded as external factors. First, knowledge as power is the value an individual attributes to the knowledge possessed, this means that if one perceives that power comes from knowledge possessed this person may not share this information as it puts him or her in a powerful position. Second, reciprocity is a give-and-take of knowledge and may improve knowledge sharing when individuals perceive that they can provide value to one another. Third, the relationship with the recipient is based on the trust and the power and status of the receiver. Fourth, rewards for sharing may facilitate knowledge sharing as it may provide a reward for engaging in knowledge sharing or a punishment when knowledge is kept to one’s self.

Furthermore, opportunities to share knowledge are also an important factor in the knowledge sharing process and either come in formal or informal natures. Formal opportunities are related to training programs, structured work teams and technology-based systems. These are regarded as formal due to their nature of explicitly obtain and share knowledge. Informal opportunities are personal relationships and social networks which may improve learning and knowledge sharing (Ipe 2003).

Gharawi and Dawes (2010) investigated knowledge and information sharing in transnational knowledge networks (TKNS) in which international cooperation takes place in order to tackle
international issues in certain fields of government institutions or NGOs. They mention that these networks can either be vertical, which are focused to align national and international rules by using certain procedures, or, horizontal, which are networks which rely on more on knowledge and information sharing.

Furthermore, Gharawi and Dawes (2010) identify five characteristics of transnational knowledge and information sharing networks: (1) two government agencies located in two different countries who are focused on a specific issue through knowledge and information exchange, (2) the exchange process can also include non-governmental actors such as non-profit, private and supranational organisations, (3) the exchange process has to be flowing from both sides, (4) both parties may exchange similar type of information or knowledge, (5) it is a process which is not tightly controlled by legislatures or executives.

Bhagat et al. (2002) proposed a theoretical framework in order to understand four transacting cultural patterns. In this model they argue that cross-border knowledge transfer is related to the type of knowledge which is part of the transfer process. The knowledge transfer is then moderated by two factors: (1) the nature of transacting cultural patterns and (2) the cognitive styles of the individuals involved in such transactions (Bhagat et al. 2002, p. 205).

Ardichvili et al. (2006) investigated knowledge sharing in online communities of practice and mentioned that few research was conducted into the area of cross-cultural differences which might affect knowledge sharing patterns. They mentioned that some of Hofstede’s dimensions could have an influence on knowledge sharing as individualism versus collectivism is related to an in-group versus out-group perspective. This may have as a consequence that individualistic cultures share knowledge more because they have a less strong focus on the in-group. Furthermore, Ardichvili et al. (2006) also mentions the importance of the fear of losing face, importance of status, power distance and horizontal and vertical cultures.
3.2. Knowledge and Culture

Wiseman, Hammer and Nishida (1989) investigated the role of intercultural communication elements on the understanding of information between parties of different cultures in which they use Gudykunst et al.’s (1977) model of cross cultural attitude. They noted that knowledge of the other culture and the attitude towards it and its members play an important role in determining the effectiveness of communication across cultures.

Knowledge of the individual or organisation to where information is directed is important in order to minimize misunderstanding with this target. This would include knowledge of the language spoken by the target, values, beliefs and ideology of the target. By understanding the target’s culture, one is able to anticipate on the way the target may behave and it can therefore be understood more easily.

In addition, attributes an individual holds towards another culture also play a central role in impression formation of a specific culture. This impression will eventually also have an effect on the level to which one is able to understand the target. It is thought of that one’s attitude towards another culture is based on three components. First, the cognitive component, which is basically an assumption based on stereotypes of the other culture. Second, the affective component, which can be thought of as in-group identification and the out-group is evaluated in reference to the in-group’s standards. In other words, the own culture plays a central role and the other culture is evaluated in relation to the own culture. Third, the conative component is concerned with the behavioural intentions of an individual. Some individuals may have a greater intention to interact with other persons, which may result in more and more accurate information obtainment and the understanding of this information.

Wiseman, Hammer and Nishida’s (1989) found that for cultural-specific understanding, one’s affective component was the strongest predictor, followed by the conative component. The findings for the conative component showed that people who experience more social distance towards the
other culture expressed greater understanding compared to people with less social distance. This would indicate that a greater avoidance of a certain culture may lead to a greater understanding of that specific culture.

Jarvenpaa and Leidner (1999) go further on the Wiseman, Hammer and Nishida (1989) research and link Hofstede’s dimensions to the disclosure of information to another party. They discuss the individualism-collectivism dimension as it is thought that individualistic cultures engage more in open and exact communication than their counterparts from collectivistic cultures. Also, they assume that individuals who have more experience in intercultural encounters will disclose information more easily than those who lack or have a limited experience in intercultural encounters. Their research was focused on trust and partly on the influence of culture on trust, even though they did not find any significant differences, it may still be interesting to assess their reasoning in this research as it is more focussed on information disclosure.

Johnson, Lenartowicz and Apud (2006) have a similar reasoning to Wiseman, Hammer and Nishida (1989) as they describe cross-cultural competence by using LaFromboise et al (1993: 396) as an individual would have to: ‘(1) possess a strong personal identity; (2) have knowledge of and facility with the beliefs and values of the culture, (3) display sensitivity to the affective processes of the culture, (4) communicate clearly in the language of the given cultural group, (5) perform specially sanctioned behaviour, (6) maintain active social relations with the cultural group, (7) negotiate the institutional structures of that culture’ (Johnson, Lenartowicz and Apud (2006, p. 529). They furthermore made a model in order to assess cross-cultural competence (figure 1).
The personal attributes dimension includes personality traits which are accompanied by the values, norms and beliefs of one’s home culture. The personal skills dimension is concerned with the abilities one has gathered over time and the aptitude, which is considered rather similar to ability and thus skills. The cultural knowledge dimension focusses on the specific and general knowledge about a specific culture, language and interaction rules. General knowledge is more concerned with the general knowledge and cultural difference of which one is aware, such as being able to compare cultures and differences in economic, legal and social systems in a certain culture. Specific knowledge is concerned with, for example, geographical knowledge, history, politics and general rules on what to do and what one should not do (Johnson, Lenartowicz & Apud 2006).

Institutional ethnocentrism is related to imposing structures processes and mentalities of the home culture, which is relevant for international subsidiaries in business settings and might be of less importance in international cooperation. Cultural distance is the general cultural differences between home culture and target culture. This might be linked to Dawes et al’s (2012) research on factors important in the transnational public sector knowledge networks (TPSKNs). They identified...
three layers which are important in this process; knowledge and information, organisational and national contexts.

The knowledge and information context is concerned with two types of knowledge, tacit and explicit knowledge. Explicit knowledge can be expressed in words, writing, numbers or symbols, whereas tacit knowledge cannot be transferred as a common good, it is within an individual or organisation (Brown & Duguid 2001; Dawes et al 2012; Osterloh & Frey 2000; Seppänen et al 2013). In addition, Dawes et al (2012) mentions that articulation is an important factor as it may determine the effectiveness of the knowledge shared.

The organisational context is relative to the ability of an entity to learn from another and this would be determined by relative characteristic of the two entities (Dawes et al 2012; Lane & Lubatkin 1998). Furthermore, trust is a concept that is important in relationships between two organisations. Trust is based on three elements; ability, benevolence and integrity. These elements partly summarize that an actor will not engage in a trusting relationship with another actor when one of these elements is evaluated as negative. Ability, for example, is concerned with the assumption that the trustee is able to provide on promises made. Benevolence is the willingness of the trustee to do good to the trustor and integrity is the extent to which a trustee sticks to generally accepted rules and structures (Mayer, Davis & Schoorman 1995). Trust will be discussed more thoroughly later on in this literature review.

The national context is primarily concerned with cultural aspects such as norms, beliefs, language, political interests and laws which may explain differences in the behaviour of another organisation located across the border. Norms and beliefs may indicate that someone prefers to be contacted in a certain manner different to the normal procedure in the home country. Language differences are quite straightforward as knowledge and information shared might be lost in translation, as Seppänen and Virrantaus (2015) also mentioned (Griffith, Myers & Harvey 2006; Huff & Kelley 2003; Lucas 2006).
3.3. Contextual distances

In addition to the contextual layers, Dawes et al (2012) presented a number of contextual distances. These distances were derived from the contextual factors, as they by themselves create distances between organisations. The distances may affect the relationships between two or more organisations and prohibit them from collaborating. In total, Dawes et al (2012) mentioned nine contextual distances. These contextual distances will be first described after which they will be linked to the scope of this research.

*Cultural Distance*

As defined by Hofstede and Bond (1988 p. 6) ‘culture is the collective programming of the mind that distinguishes the members of one category of people from those of another’. Research conducted by Hofstede provided the area of social sciences and cultural studies with dimensions on which cultures could be assessed. In Hofstede and Bond (1988), the four initial dimensions were discussed. Power distance was the first dimension discussed and represents inequality, as some cultures show more unequal characteristics than others. Individualism versus collectivism is the next dimension and is relative to the level of integration into groups. Individualistic societies will be characterised with less concern for others than do collectivistic cultures. Masculinity versus femininity is another dimension which is related to the appearance of masculine or female characteristics in a society’s culture. The fourth dimension is concerned with uncertainty avoidance, in essence, how comfortable a culture is with uncertainty or unstructured situations (Hofstede 1984).

Hofstede added a fifth dimension in 1991, which focuses on long-term versus short-term orientation, thus, the time-span in which future results should be achieved (Hofstede & Minkov 2010). A sixth dimension was accepted by Hofstede in 2010, after research carried out by Minkov (2007). The sixth dimension concerns indulgence versus constraint, which basically measures happiness and life control as well as importance of leisure (Minkov 2009). Furthermore, in communication, Brew and Cairns (2004) investigated the way in which information is communicated
in individualistic and collectivistic cultures. As their research was a comparison between Asian and western culture, it may prove not to be transferable to this research, however, it may occur and is therefore still interesting to investigate further in this research as the Netherlands is more individualistic and Germany more collectivistic.

*Political Distance*

Political distance refers to differences in laws and policies, as well as political views on open information exchange (Dawes et al. 2012). The Netherlands, Belgium and Germany have a rather similar approach to the exchange of information without any noteworthy legal or political differences. Internal barriers within the European Union were often abolished long ago and when a government of a member state intends to undermine the general hold principles of freedom of information, this does not go without involvement of the European Commission.

*Intention Distance*

Intention distance is concerned with the differences organisations have in their missions and goals. It can be expected that emergency services in the Netherlands, Belgium and Germany will have the same missions and goals, that is, to protect the general public when a disaster strikes and to prevent disasters from happening (Dawes et al. 2012). This is also what Dawes et al. (2012) states, similarities in missions and goals can be seen as elements through which bonding may occur. Samaddar, Nargundkar and Daley (2005) found that an understanding of managers of inter-organisational information sharing will provide them with flexibility from which adaptation to the complexity of inter-organisational relationships may be beneficial.

*Organisational Distance*

Organisational distance refers to a difference between two similar organisations. This entails differences in terms of organisational structures, values and processes (Dawes et al. 2012). As described previously in this research, the way in which the security regions are structured in the two
countries studied, there is only a slight difference in organisational structure. In the Netherlands the focus is more on collaboration of municipalities within one security region, whereas in Germany this is structured on a more local and district level. From these structures, there may be differences in the definition of authority and responsibilities which may eventually affect the way in which employees of organisations interact or share knowledge (Narteh 2008).

Relational Distance

Relational distance is related to the level of similarity and relation of the organisations involved. As the organisations studied in this research are all concerned with similar services, it may be expected that relational distance is minimal. Dawes et al. (2012) notes that relationality will increase over time when organisations get a greater understanding of each other and from positive experiences trust may evolve. They also use Norman (2002) in which it is stated that parties in a collaboration will become subject to norms of reciprocity through behavioural expectations and greater understanding of the other party involved.

Knowledge Distance

Knowledge distance refers to the difference in knowledge between two or more organisations. This may be a point of interest for this research as training procedures of fire fighters and medical personnel might differ among the three countries studied. Furthermore, a certain level of knowledge may facilitate collaboration as it eases the understanding between two organisations and not all knowledge would have to be translated into other definitions in order for the knowledge or information to be understood by the other party (Szulanski 2000). However, it is also mentioned by Inkkpen (1998) that in case the knowledge distance is small, new knowledge may prove difficult to reach and new occurring problems may therefore also prove difficult to solve.
Resource Distance

Resource distance refers to the difference in contribution to a certain network. For example, in Germany there is a ‘Technisches Hilfswerk’ (THW) which is specialised in technical support to other authorities. Such an institution is non-existent in the Netherlands. Furthermore, it may be that the hospitals in the south of the Netherlands seek more cooperation with the hospital of Aachen (Germany), because of the existence of a specialised clinic for the treatment of burn victims. In general, resources may come in different forms such as differences in funding, employees and contribution to the cooperation. Dawes et al. (2012) also stresses out that cooperation with organisations that are able to complement each other may be more beneficial as they provide more opportunities than organisations which are highly similar to each other.

Physical Distance

Physical distance refers to the geographical locations of the organisations involved. As the scope of this research aims to investigate relatively nearby located institutions, this might prove to be a minimal issue in the process of knowledge and information sharing between the institutions. As also mentioned by Dawes et al. (2012), organisations which are closely located to each other are more able to engage in behaviour through which social capital and tacit information is transferred more easily. These organisations will also seek more contact with each other as they are more involved with each other than organisations which are located further away.

Technical Distance

Technical distance relates to the interoperability of systems across borders, mainly IT systems related to telecommunication and it was also noted by Tsugawa et al. (2008) that IT infrastructure is critical to the success of data sharing networks. This may prove a problematic issues as the countries in this research use different forms of communication systems for their emergency
services. Sonnenwald, Maglauflin and Whitton (2004) also state that reaching a situation awareness is mediated through technology when organisations are collaborating.
4. Method

The reviewed previous research in the theoretical framework has led to the construction of the subsequent research method. First, the characteristics of the participants of this study will be discussed. The regions which were contacted and how many people eventually responded to the requests for participation in this study will be given. This research made use of semi-structured interviews of which the general procedure will be discussed into more depth. Lastly, the process of data analysis will be provided with the eventual discovered categories and inter-rater reliability scores.

4.1. Participants

A total of 10 participants from 10 different organisations across the Netherlands and North-Rhine Westphalia were selected using purposive sampling. The participants had to meet the following criteria. First, the participants had to be employed by an organisation responsible for the Dutch or German fire or police department in a region directly bordering to either the Netherlands or North-Rhine Westphalia. Second, participants had to have responsibility over the international cooperation of their organisation with the bordering region, participants who were still employed by the fire department or police department and who had had responsibility over the international cooperation were included in case there was no current employee with responsibility over international cooperation. The target group of this research were the Dutch security and police regions sharing a border with the German state of North-Rhine Westphalia. The Dutch regions that participated in this study were the security regions of Twente, Gelderland-Zuid, Limburg-Noord and the EMRIC organisation, which is a cooperation between the security region of Zuid-Limburg, GGD Zuid-Limburg, the German districts of Heinsberg, Cityregion Aachen, the city of Aachen and the Belgian provinces of Liège and Limburg. Furthermore, the police regions of Oost-Nederland and Limburg also participated in the study. The German regions which participated in this study were the fire departments of Gronau (Westf), Kleve and Aachen, in addition, the German police department of
Gronau also participated in the study. Ten of the invited total of thirteen participants agreed to take part in this study. Participants were not rewarded for their participation.

4.2. Semi-structured interviews

Through the use of semi-structured interviews elements can be discovered into more depth as of what influences the cooperation of emergency services on more local levels. Therefore, a qualitative design was most suitable for this research, also keeping in mind that the participants suitable for this study are relatively few in number. The interviews were conducted on the location where the participant has his or her office, in addition, the interviews were conducted in the native language of the participant. In general, the interviews lasted between 30 and 50 minutes and they were recorded with the consent of the participant, information on confidentiality and anonymity was also provided to them. The researcher informed the participants that they, at any time, were able to indicate that certain parts of the interview should be considered as confidential.

Each interview started with a broad explanation of the research and the motivation for this research was also clarified to the participants. First, the interviewer asked for the general views on the cooperation of the participant’s organisation with the relevant organisation from across the border. Next, the participants were asked their perception of international collaboration as having an added value or for it to be more as an investment. Third, the interviewer asked the participants which factors they perceive as limiting towards international cooperation. In line with the third question, the fourth question was to name facilitating factors towards the international cooperation. Fifth, the participants were asked for their perceptions of differences between their and the other organisation within the cooperative relationship. In case the contextual distances of Dawes et al. (2012) were not discussed during these five questions, the interviewer would ask questions directly linked to these contextual distances. Finally, the participants were offered the opportunity to read the transcriptions of the interview and they were informed that the research will be shared with them after finalisation.
4.3. Data analysis

The interviews were transcribed verbatim and analysed in Atlas.ti. First, the data was analysed through the use of codes resembling the contextual distances of Dawes et al. (2012). The second coding round involved an exploration of additional codes alongside of the contextual distance codes. During this round, it became clear that the contextual distances of Dawes et al. (2012) did only represent the comments made by professionals to a certain extent and additional codes were therefore needed to provide an honest representation of the data. Codes such as communication, financial factors, history, future, geographical location, priorities and operational factors were therefore added. After the second coding round the amount of codes used was 17, as some codes corresponded with other codes, an additional coding round was required. During the third round of coding, the data was narrowed down due to similarity, diversity or lack of comments.

The initial code of knowledge distance existed of comments which were related to a wide variety of comments on procedures, political influence, culture and media, therefore this code was divided among these codes and eventually deleted as a stand-alone code. Other codes were combined, such as intention with personal views. Eventually, 13 codes remained and these codes could be grouped according to their similarity. This resulted in the formulation of four general categories. The four general categories discovered were; communication, resources, organisation and personal factors. In the following round, the data was coded into subcategories for communication (media, language, communication procedures, procedural knowledge and culture), resources (technical, organisational and financial), organisation (operational, relational factors, geographical situation and political influence) and personal factors (intention and personal network). The discovered categories and subcategories were then defined in a codebook.

After the development of a codebook, a second coder was approached and asked to code 25 quotes of the overall categories resulting in an initial kappa of .63. Then, the second coder was asked to code quotes of the subcategories (11 for communication, 8 for resources, 10 for organisation and 5 for personal factors), this resulted into initial kappas of .65 (communication), .62 (resources), .25
(organisation) and .62 (personal factors). Subsequently, an extensive discussion with the second coder was done which resulted into the re-classification of several comments, the kappas eventually increased to .78 (overall categories), 1.00 (communication), 1.00 (resources), .74 (organisation) and 1.00 (personal factors). The rather large difference between the initial and eventual kappa in the category of organisation can be explained through the reclassification of comments within the subcategories of operational factors and relational factors.
5. Results

In this section the categories that emerged from data analysis will be discussed. The four general categories will be explained followed by a table in which the subcategories will be defined and sample comments are shown. Following each table, the subcategories will be explained into greater detail by showing the variety of comments made within each subcategory.

The main result of this research is that the discovered categories and subcategories are only partly in line with the research of Dawes et al. (2012) in which contextual distances are proposed. The application of these contextual distances to this research resulted in the adjustment of these contextual distances so that they were applicable to the professional area of international cooperation of emergency services. The knowledge distance was dropped in this research and divided over other categories such as organisational procedures, media, culture and political influence. The physical distance was renamed to geographical location, as this name seemed more applicable to this research and the comments made by participants.

Furthermore, the reformation into four general categories is different to the contextual distances of Dawes et al. (2012). The four general categories were perceived to be the main categories which may influence the international cooperative relationship of emergency services. Other distances were added such as the media, language differences, organisational procedures, financial resources, operational factors and personal network. Instead of talking about distances, it seemed more convenient to talk about limiting and facilitating factors as not all categories create distances among the parties involved in the cooperation. Limiting factors are rather similar to distances as they propose a barrier or distance between two organisations. Facilitating factors are rather different to distances as they propose a similarity or communal element on which cooperation may be build or further developed. Related to comments made on language differences, the label of neutral factors is introduced as some comments did not indicate it as being limiting or facilitating.
5.1. Communication

Factors related to the communication between two or more individuals or organisations within the international cooperative relationship. After analysis of the data, it seems that this communication may be influenced through the use of media, language, organisational procedures and cultural elements. This is in line with previous research on intercultural communication, the knowledge of organisational procedures and the use of media and the influence of language. Table 1 provides definitions and sample comments on the subcategories analysed within communication.

Media

Overall, the use of media was seen as a limiting factor in the development of a good cooperative relationship with only one participant mentioning it as facilitating: ‘Control rooms call each other, with the addition of an e-panel. Mobile devices are exchanged so they can listen to what is happening here directly.’. Participants have often mentioned the communication systems which are in place to facilitate direct communication lines between emergency services of two different states. In the past the use of analogue communication systems resulted in the exchange of radio equipment solved this issue and this is still done in some areas at the moment, however with the new digital communication systems this exchange could become something of the past. The digital radios have the possibility to connect with the channels of the neighbouring country, though it was stated that this is still a complicated trajectory which takes time to establish once an incident occurs. In addition, the importance of control rooms were mentioned as well, as they manage and allocate resources to a certain extent during an incident. It was said that control rooms follow certain procedures on how and who to inform in case an incident might affect the neighbouring region.
<table>
<thead>
<tr>
<th>Category</th>
<th>Issues related to:</th>
<th>Sample comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>Communication transferred through the use of technical devices.</td>
<td>‘We only had analogue communication devices back then, which were overloaded instantly. This means that the fire department could not reach the police department, the system was not build for this amount of traffic. This also meant that the control room was overloaded with phone calls and that the German assistance did not go through the agreed structures. This was also a reason, during the following years, why we thought about how to improve communication and this is now done digitally. We have direct lines between control rooms.’</td>
</tr>
<tr>
<td>Language</td>
<td>The influence of languages on the communication process between two parties from a different linguistic area.</td>
<td>‘This morning there was a translator present, though everyone present spoke German, you still noticed the importance of the translator. The talks were about the text in an agreement and sometimes it was about small words, where we agreed with each other, though the translation was not right. Then you see that some words in German do have a different meaning compared to the meaning we would give it in Dutch.’</td>
</tr>
<tr>
<td>Organisational</td>
<td>The structures in place within an international cooperative relationship.</td>
<td>‘The control rooms have two tasks, one task is to look if we have enough capacity or if we need help from across the border, or even ‘Limburg-Noord, this depends on the incident. There are plans for this, is this the case, than they use fixed steps with fixed key-words as well. We are located in an area with three languages... We have certain key-words and behind these key-words are linked capacities. For example, the control room here calls to Aachen and asks, can I have EUMED 2 towards ... and EMRIC 3 towards this post. The other side is, in case chemical particles in the air are to be measured, then we also provide information on that. We have forms for this in all three languages and this is then sent through mail.’</td>
</tr>
<tr>
<td>Culture</td>
<td>The perceived influence of culture in the communicative process.</td>
<td>‘Germany is a bit more closed compared to the Netherlands. Look at the provincial risk map in the Netherlands, the regional risks are open to all civilians. Some aspects we communicate actively. In Germany, the people are not so fond of releasing risk profiles. Than you also reach the point of hierarchy, if you meet someone who does not have the power to decide, than you can forget about anything arising from a meeting. In this case, you really have to speak with someone higher-up the chain of command in order for new things to arise. This is something the Germans are somewhat careful with.’</td>
</tr>
</tbody>
</table>
Language

Language was not so much seen as a major difficulty and limiting factor in the cooperation. Still, there were six comments made by participants that it was still difficult to communicate with each other from time to time: ‘Language can be a difficulty, in practice it is almost always the case that we try to speak our best German. On the German side, there are only few people who speak some Dutch. It may be difficult sometimes and it may also be a barrier for some Dutch colleagues to get involved with the international cooperation, especially on an operational level.’ Another participant mentioned the importance of having translators present while discussing legal agreements as words might be misunderstood or wrongly interpreted which could have consequences in practice. On the other hand, participants made neutral comments related to language as not perceiving it as a limiting factor nor a facilitating factor: ‘What is done in practice is not that Germans and Dutch work among each other, you divide an incident in several boxes. The German commander will combat one part with his or her team and on the other side the same is done by the Dutch.’ Others have mentioned that communication sometimes takes place in the local dialect which is understood by the people who come from the direct vicinity of the border which may be regarded as facilitating. Furthermore, jargon of professionals was perceived as similar by the participants.

Organisational Procedures

Participants mentioned structures which are used to communicate incidents and possible hazards to neighbouring regions through the control rooms or other agreed procedures, in case such procedures are not followed, it may result in a lack of information and knowledge transfer on an incident which might affect the region in question: ‘What can be seen as limiting is the exchange of plans. I have had a meeting with (location) this morning, (location) has taken initiative to form an agreements on this exchange of plans.’ Some participants also stated that they would prefer to have a greater understanding or insight into the crisis management structures of the other in order to
develop understanding and know-how on who has to be contacted in order to achieve something during an incident or when agreements have to be reached. Professionals of the police force noted the importance of following procedures to gain information from the neighbouring region as not following these procedures could present people with questions on which they should actually not answer on. Another aspect of organisational procedures is the change of structure which the Dutch security regions have undergone and which meant the change of responsibilities over the fire department to some extents: ‘They are familiar with the security region, however, they would prefer to have contact with the provinces as was done before the introduction of the security region.’ Dutch participants perceived that their German colleagues needed some time to adapt and understand this new structure. Some participants also mentioned that due to this structure change, the felt distance between the organisations increased as the persons with whom they were in contact, sometimes for years, also changed.

Culture

Participants commented on the difference of hierarchy within the organisations and that they may pose problems in order to arrange meetings with the right professionals from across the border. One participant stressed out an approach to culture on three different areas; culture to systems, culture to language (discussed earlier), culture to the informal aspects. Culture to systems was described as the differences in organisational structures which present differences in contact persons. The participant noted that to come to an agreement in Germany, you sometimes only had to contact the municipality, while on the other side of the border in Belgium, they had to go through five different governmental layers to reach the same agreement. Others have made comparable comments: ‘It is always a search with whom you have to speak or sit around a table. Germany is more hierarchical. It takes time before you found the person who can make decisions.’ Culture to the informal aspects involve the way in how meetings or information exchange proceed. For one professional it may seem that a quick information exchange on a, for them, minor incident is not
important to communicate, however, the professional from the other region might find it extremely important that the incident had to be communicated. Furthermore, participants stated the difference in risk communication in terms of openness towards civilians. One professional stated that: ‘A casual conversation with a German is almost impossible without knowing them well. In case you do know them quite well and there is trust between yourself and the other you can have a casual conversation. You have to have a connection, without this it won’t work.’ Furthermore, in the Netherlands, the security regions have a map on which every inhabitant of the Netherlands is able to see which risks are in his or her area. In contrast, the Dutch participants perceived that in Germany they were less open to such an approach, also because revealing such risks can have consequences for property values and so on. Some participants have also mentioned the difference of cooperation between different German states. In general, the region in question has a good cooperation with both North-Rhine Westphalia and Lower Saxony, though within Germany this may pose difficulties as every state has a different emergency services and crisis structure.

5.2. Resources

As taken from Dawes et al. (2012) refers to the difference in contribution to a certain network. Interpreted in alignment with this research, it is seen as the resources one party has to offer and might provide benefits to the other party within an international cooperative relationship. Three categories of resources arose from the data analysis. Table 2 provides definitions and sample comments on the subcategories discovered. All comments made by participants in relation to the resources the cooperative partner has to offer were seen as facilitating the cooperation as a whole.
Table 2
Results of the content analysis for resources within the international cooperation

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues related to:</th>
<th>Sample comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Resources</td>
<td>Resources related to the pool of technical devices or vehicles available to an organisations which might be used in cross-border incidents.</td>
<td>‘We used a Dutch army helicopter, a large Chinook from the air force to combat a fire in a natural reserve which is located right on the border. It also flew across the border, you have to agree upon this first, even though you can’t even see the border in a natural reserve.’</td>
</tr>
<tr>
<td>Organisational</td>
<td>Resources derived from the organisational structures or priorities of the organisations in an international cooperative relationship.</td>
<td>‘Even though we have a powerful structured fire department, it does not limit the cooperation. Who knows what will happen in the future.’</td>
</tr>
<tr>
<td>Financial Resources</td>
<td>Monetary resources of an organisation which may provide it with some advantages interesting for another party.</td>
<td>‘The financial question is not as important as here in Germany. When someone in the Netherlands says, we need this, it is important, than it can be bought by the security region. The Dutch are now about to buy 60 new trucks, that would not have been possible here. In Germany it is different, everyone has to have its truck in a different way.’</td>
</tr>
</tbody>
</table>

**Technical Resources**

Technical resources relate to the technical devices or vehicles which one might own and could be beneficial to the other party. Dutch participants often named the THW (Technisches Hilfswerk) as an interesting partner. The THW has to be seen as a separate organisation from the fire brigades, it may assist fire brigades in need of technical and logistical support: ‘The THW, that is of great additional value on what kind of resources they have in Germany, we can still learn from this in the Netherlands.’ Furthermore, the amount of vehicles a German fire brigade normally owns is thought of as a beneficial resource. From a German point of view, comments were made with regard to the variety of vehicles in the Netherlands ‘In the Netherlands you can see some vehicles more often, than you become interested in serving yourself with these vehicles as well.’
Organisational Resources

Organisational resources relate to resources which can be derived from the organisational structures or priorities it sets. The comments made towards this category mainly came from Dutch participants, who stressed out the importance of the amount of fire fighters in Germany. They indicated that it would be beneficial to have a strongly organised neighbour in terms of manpower in case a large scale incident might happen. Comments made by German participants were all related to the need for a good neighbour in case something large would happen in the future and help is required.

Financial Resources

Both organisations are financed in a different way. The Dutch fire department is financially supported through a regional structure and therefore managed through regional financial resources. German participants mostly admired this as it provides a fire brigade with more availabilities in terms of practical training and modern equipment. Also in terms of financial remuneration of personnel was mentioned as a German volunteer does not receive much remuneration compared to the Dutch volunteers, in contrast Dutch participants perceived that their German colleagues received more social rewards in terms of social and festive events.

5.3. Organisational Factors

Factors were identified which influence the cooperation overall such as; practical cooperation in the form of actual incidents or common trainings, similarity in priorities, mutual elements which may facilitate or impede cooperation, geographical reasons and the influence of politics on the work and decisions of the organisations within an international cooperative relationship. Table 3 shows the subcategories of the main category of organisational factors with definitions and sample comments.
### Table 3
Results of the content analysis for organisational factors within the international cooperation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues related to:</th>
<th>Sample comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Factors</td>
<td>The practical cooperation of the organisations in an international cooperation.</td>
<td><em>‘A while ago we had a cinema fire and needed the help of the turntable ladder truck of Enschede, in 10 minutes it was here.’</em></td>
</tr>
<tr>
<td>Operational Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Comments;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Limiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Facilitating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Factors</td>
<td>Mutual elements which facilitate or impede cooperation because they are not exclusive to just one region.</td>
<td><em>‘There are two shared elements here. First, the fire fighting in general, we have common forests, water areas in the Netherlands where we can provide assistance and also the straightforward incidents as rescues, traffic collisions and accidents. Those are the points which occur the most and where our help is requested sometimes.’</em></td>
</tr>
<tr>
<td>Relational Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Comments;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Facilitating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical Situation</td>
<td>The amount of influence of physical location on the importance of international cooperation.</td>
<td><em>‘From the history, that Aachen is directly on the German-Belgian-Dutch border, we already had a long history of international cooperation.’</em></td>
</tr>
<tr>
<td>Geographical Situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Comments;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Limiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Facilitating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Influence</td>
<td>The influence of political actors within the decision making and day-to-day tasks of the professional of an organisation within the international cooperation.</td>
<td><em>‘You have the security regions, which are managed by the municipalities, which always have a say in things. You also have the province which cooperates internationally, the ministry of security and justice and also the Euregion, all which try to have a say. In Germany you have the districts, the state, national government and also the Euregion. You actually have a sort of spaghetti-network of actors which you have to oversee and which have to want the same in a small area in order to reach something, it can complicate things.’</em></td>
</tr>
<tr>
<td>Political Influence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Comments;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Limiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Facilitating</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operational Factors**

Participants made comments on practical cooperation which is planned or happened in the past. Practical cooperation related to the cooperation between villages along the border being served by a fire department from across the border, infrastructure being served by both neighbouring fire departments and agreements on the use of resources of the other. Comments were made on the cooperation which took place during the fireworks disaster in Enschede, where the procedures might not have been followed strictly, however the spontaneous cooperation which took place during this incident was greatly appreciated and regarded as extremely positive. In
general, the comments made related to the combat of incidents in border towns where, in some occasions, the fire department from across the border could respond more rapidly. Related to the joint response to incidents and which may be able to be perceived as limiting is the difference in response to automatic fire alarms: ‘We are trying to limit response to automatic fire alarms, whereas in Germany a response to this is highly valued, also because it usually involves a vulnerable group of people. On the other hand, it was not for long that we were doing the same, now it is also because of their regulations and the agreed procedures that we support them during such a response.’ In addition, participants were aware of the need for operational cooperation in case large incidents strike and procedures for operational cooperation are in place before difficulties may arise during practical operations.

Relational Factors

Factors which were experienced or could have an effect on both regions in the cooperation were mentioned by participants. Comments related to sharing motorway sections where a more rapid response from one country is possible: ‘On this so-called neutral street which connects two areas in the Netherlands over German territory, a lot of cooperation takes place. Also from a historical point of view as this street used to be only accessible from the Netherlands without connections to Germany.’ Other elements include rivers flowing through both regions and forests located on the border. In general, this factor can be related to the vital infrastructure which is shared among the organisations in a region.

Geographical Situation

Participants noted the straightforwardness of cooperation in geographical locations where the border is so near that it would make more sense to cooperate with the organisation across the border than an organisation within the own nation state. One participant portrayed the example of the region of Zuid-Limburg, which only shares a border for around six kilometres with the rest of the Netherlands. Another participant noted the case of the Dutch city of Vaals, which could be
considered as a suburb of the German city of Aachen, making cooperation here straightforward due to its geographical location. Other comments included the view on Enschede and Gronau as if it would be one agglomeration, also due to the continuous traffic of people crossing the borders for leisure activities as commented by a professional of the police force: ‘We often talk about the same criminals, they cross borders continuously. Though also the exchange of people is intensive. People from Gronau go shopping in Enschede, people from Enschede go shopping in Gronau or visit bars or cafes.’. Limiting factors relating to the geographical situation relate to the felt distance between organisations once large incidents develop: ‘Suddenly you have to talk with Düsseldorf instead of with your neighbouring district, it at least is a felt distance which you have once responsibility shifts’.

Political Influence

There is a certain connection with political actors who may have an influence on the organisations concerned in this study. First of all, public administrators, usually majors or regional presidents, are involved when agreements have to be formalized and accepted. Besides this, the security regions in the Netherlands are directed by the majors of the region. Even though, a major in the Netherlands can be considered as non-political actors, most are affiliated with political parties and local councils. Participants made comments that they are aware of a certain political influence on the cooperation, however, on a local level they perceive that the major influence comes from higher up the political ladder where national or state-level administrators or ministers provide them with guidelines for making agreements. The sample comment resembles the general comments made by all participants regarding political influence.

5.4. Personal Factors

Personal factors are related to an individual part of an organisation within an international cooperative relationship. These individual factors relate to the intention individuals have towards the cooperation and the possible benefits one may derive from their personal network. Table 4 provides an overview of the categories within the personal factors with definitions and sample comments. The
majority of the comments within this category were seen as limiting, however to some extent they can be seen as facilitating as well. Some comments relate to a negative aspect as a lack of intention or a lack of personal network, which become positive facilitating aspects once a professional has ownership over those two elements.

Table 4
Results of the content analysis for personal factors within the international cooperation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues related to:</th>
<th>Sample comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>Personal intentions towards the international cooperation of the organisation.</td>
<td>‘I have the idea as if the question of how the cooperation is evaluated depends on the involved individuals. This means, in case I am a networking person, I have people who I can contact ... However, it lacks, or I think this lacks, practical rules that something like this goes automatically. In case we have information which is important for the colleagues from (location), that we will send this to them regardless of who is the person handling the information.’</td>
</tr>
<tr>
<td>Personal Network</td>
<td>Factors related to individuals and their network or personal motivations to engage in behaviour facilitating international cooperation.</td>
<td>‘You have to know who to contact and because of the different structures, it may be difficult to find this person. The fire brigades know to find each other, you know who is in charge, you basically do the same things. In case you have to talk with a public administrator it may become very difficult. You than experience the differences in structures, even within Germany.’</td>
</tr>
</tbody>
</table>

**Intention**

After data analysis, it became clear that the respondents made more connections with personal intentions towards the cooperation. Participants made comments on the importance of having an intention to engage in cooperative behaviour and this should be portrayed by the professionals in charge of the organisation or the professional concerned with international cooperation: *‘It sometimes depends on the person in question. What I mentioned earlier, my predecessor just did not have a lot of affiliation with Germany, maybe he was more involved with his own area. He just did not do a lot, he did not invest energy into it, it depends on the person.’* A lack of intention was perceived as having a negative spill-over towards other professionals within the organisation and a formalisation of cooperation as a whole. The comments were relatable to each
other, nevertheless some participants perceived the intention towards cooperation in a limiting view as others perceived it more in light of facilitating behaviour.

**Personal Network**

Participants noted the importance of connecting with the right professionals or administrators from the neighbouring regions. This connection also stands in light of perceiving the border as a barrier: ‘At the moment that you are involved with a certain theme, and we still see this, also with younger colleagues, they still see the border as a barrier. It is actually possible to just cross the border and have a conversation with a German colleague to discuss a certain topic. Those are developments which require some pushing in order to create clarity and improve cooperation.’ By having a network and knowing who to contact in the neighbouring regions, it may ease cooperation for the organisation as a whole as valuable time is not lost in encountering the right conversation partner: ‘I have a fixed contact. We meet each other regularly and talk about upcoming events, exchange information and make sure that others receive this information as well’. This shows that having contacts and agreed structures of how to communicate information discussed in these networks, others may take advantage from these meetings as well.
6. Discussion

In this section, the main findings will be given first. Subsequently, the theoretical contributions and recommendations for professionals are provided. Furthermore, the limitations and directions for future research are discussed. Finally, an overall conclusion of the research is provided.

6.1. Main Findings

This study aimed to examine influential factors in the international cooperation between police and fire departments on a more local level. Previous research formed the basis of this study in order to structure interviews around already discovered factors in relation to international cooperation. The main framework used were the nine contextual distances proposed by Dawes et al. (2012). Data analysis portrayed new categories which were perceived to be important to the participating professionals during international cooperation. These new categories, in relation to the contextual distances from previous research, only proved relevant in some cases. After thorough data analysis, a new framework was proposed, relying on four general categories which all have relevant subcategories.

The main finding was the formation of the previously described categories with their related subcategories. Where Dawes et al. (2012) describes nine contextual distances, this research combines several of these distances resulting in four overall categories and thirteen subcategories. Whereas previous research discussed the possible distances of factors within the international cooperation, this research proposes another approach of limiting and facilitating factors. Limiting factors can be seen as distances in the light of creating barriers towards cooperation. Facilitating factors can be seen as elements on which cooperation can be build more easily and organisations or professionals are rather similar and joint benefits facilitate the cooperation overall. The four general categories with their subcategories will now be discussed into more depth.

First, communication which may be influenced through the use of media, language, organisational procedures and cultural elements. This is in line with previous research on the
influence of culture and cultural competence in the communication process (Chen, Chen & Meindl 1998; Gudykunst et al. 1977; Jarvenpaa & Leidner 1999; Johnson, Lenartowicz & Apud 2006; Wiseman, Hammer & Nishida 1989). Previous research of cultural effects on cooperation include the possible formation of a third culture when organisations face the issue of collectivist and individualistic cultures aiming to cooperate. From the results, participants were most concerned with the differences in hierarchy and informalities among partners, which may be seen as an element of the difference in culture between the two nation states. Related to the knowledge of organisational procedures and the use of media, previous research claims that humans are only able to adapt to new information with support of an adequate information infrastructure, eventually resulting in increased capacities in order to anticipate and respond to extreme events (Comfort et al. 2004; Comfort & Kapucu 2006; Dawes et al. 2012). Furthermore, language did not seem to influence the cooperation according to the participants. However, previous research has noted that even when standardisation takes place in communication, in this case Dutch professionals communicating in German, it may still form an issue as the people who have the capability to communicate in German may eventually experience more power due to their linguistic advantage (Marschan-Piekka, Welch & Welch 1999).

The identified categories in relation to resources organisations in a cooperation have to offer are in line with previous research on the possible advantages of resource exchange. Even though most of this research is related to commercial organisations, it still shows that alliances can be formed in order to be beneficial to collaborators in the cooperation (Dawes et al. 2012; Todeva & Knoke 2005). From data analysis, the resources may come from three sources; technical, organisational and financial.

Organisational factors which may influence the overall cooperation include operational factors, relational factors, geographical situation and political influence. Operational factors relate to practical cooperation on the ground for which agreements have already been reached. Relational
factors are shared elements of both organisations in the cooperation. Dawes et al. (2012) saw relational factors as in the relational distance, as an element which can potentially form a barrier to collaboration based on the duration of the collaborative relationship. Data analysis showed that relational factors in the cooperation of emergency services might be better understood as facilitating mutual factors such as rivers or natural reserves which can be a concern to both organisations and therefore facilitate the cooperation as a whole. By having a mutual understanding of the potential risks a river, for example, may have to public health, this river may therefore become a key-point on which cooperation is build and contact is sought.

Relational factors may partly overlap with geographical situation, the main difference being that the geographical situation relates more to physical locations of towns and cities in border regions. A city and organisation located right on a national border may seek cooperation with nearby cities and organisations from across the border as they might be closer to the them than a city or organisation within their own country would be (Dawes et al. 2012). Cummings and Teng (2003) found that physical distance was not significantly related to actual knowledge transfer within commercial organisations, though it may be said that due to the nature of the organisations in this research physical locations play a vital part in response times to incidents. Furthermore, Dawes et al. (2012) also provides a political distance which is similar to what has been found in this research. They describe political distance as: ‘the gaps and conflicts among existing laws and policies, political interests and agendas of participating organisations’ (Dawes et al. 2012 p. 9). Participants in this research suggested mentioned that a political distance is usually not problematic as the national governments have agreed upon general terms for local agreements which can be used by the organisations in question as guidelines for new local agreements.

Dawes et al. (2012) has also mentioned the importance of intentions in a cooperation. This study has similar findings as intention is stressed out by participants as being an important factor as certain professionals might not hold a large intention towards international cooperation it can form a
barrier which is difficult to overcome. In addition, personal networks are of importance as a person with positive intentions towards international cooperation needs to know who to contact and how to get information from the right people in the other organisation or nation state.

6.2. Theoretical Contribution

This research builds further upon the contextual distances proposed by Dawes et al. (2012) as it formulates the framework stated in their research in a different manner and expands it on the idea that distances can be seen as facilitating and limiting. In addition, this research relates to international cooperation on a more local level between emergency services from different nation states. Not much research is done into the international cooperation of emergency services on more localised levels. After data analysis, it seems that the contextual distances which formed the basis for this study were only applicable to a certain extent and new categories had to be formed in order to portray the results in a more applicable manner.

The newly formed category of communication was not seen as a contextual distance by Dawes et al. (2012). In their research it was seen as an element of culture from which communication problems might arise. The claim of this research is that communication is one of the mayor factors of influence in an international cooperative relationship. Communication is subject to four subcategories which have proven to be important to the participants. Media related to the technical distance proposed by Dawes et al. (2012), however, as this involves systems of information sharing or data processing, it is seen as a means through which communication may flow.

The previous research has mentioned language as being part of culture, this claim may be true in a research setting where clear cultural boundaries are to be seen. As this research focussed on regions which are bordering each other, it may be that culture and language are two rather different factors. Depending on the level to which one generalises a culture, it might be said that culture and language become two separate constructs. For example, the Dutch city of Kerkrade is considered to speak the same or a highly similar local dialect as in the neighbouring German city of
Aachen. This does not automatically mean that both cities are also highly similar in culture as they might experience differences in norms and values stemming from the fact that they are located in two different nation states.

Dawes et al. (2012) elaborated on a resources and technical distance between organisations, this research sees three subcategories relating to resources. First, technical resources as they are related to the technical equipment an organisation has to offer the other organisation in the cooperation. Therefore, the technical distance is more suitable to be divided into the previously named media category, communication through technical systems, and the technical resources from which provides interesting options to one party in the relationship. Second, organisational resources relate to the advantages which arise out of the structure of an organisation. Where Dawes et al. (2012) mentioned an organisational distance, for this distance it is also appropriate to make a distinction between what is key to the organisation in terms of operational, relational, geographical and political factors and what can be offered from the organisation to another organisation. Third, financial resources were also mentioned in previous research, however, they were more related to financial performance instead of allocation of funds to particular areas in the organisation from which other organisations may also benefit.

The organisational factors found in this research were partly mentioned by Dawes et al. (2012). The operational factors were not mentioned in this previous research. Operational factors are key to the cooperation of emergency services as they describe how cooperation actually takes place on the practical level. It has to be said that the previous research was concerned with more administrative governmental cooperation, therefore this factor can be considered exclusive to the professional area researched in this research. Relational factors relate to the relational distance (Dawes et al. 2012) in terms that previous research claimed it to be the extent to which organisations know and relate to each other. Conceptualisation of this factor in this research has led to a somewhat similar definition. Relational factors are to be considered as mutual elements to two
regions on which cooperation may be build. Furthermore, the geographical situation relates to Dawes et al’s (2012) physical distance. Previous research focussed on the difficulties physical distance may have on scheduling meetings in order to establish a relationship. This research adds the claim that emergency services cooperate across borders due to the practical advantage of having an organisation nearby which may provide benefits quicker than a similar organisation within the own nation state. Political influence also relates to the political distance proposed in previous research (Dawes et al. 2012). As the organisations in this research are partly controlled by political players, they are able to influence the cooperation process because these individuals have to formalise agreements made by administrative professionals.

The last general category found in this research relates to personal factors of professionals. The intention of a professional is key to the success or development of international cooperation as these professionals are the key-players in the organisations who do or do not search for international cooperation. These findings are similar to previous research. An extension to previous research is the personal network of a professional. The personal network may overcome barriers in the search for contacts across the border and ease the cooperative process overall, previous research has not made such claims.

One of the most important contributions of this research is the re-definition of the term ‘distance’ as used by Dawes et al. (2012). The previously discussed factors do not merely create distances or barriers to cooperation, they can also provide common grounds where upon international cooperation may be build. This research therefore claims that factors can either be facilitating in nature, or either limiting in nature, which might be seen as a distance. Most factors are subject to facilitating and limiting elements at the same time, however the resource category only showed facilitating elements for an international cooperative relationship.
6.3. Practical Contribution

Results of this research can prove useful to professionals involved with the international cooperation of emergency services as it provides them with factors that have to be kept in mind while developing such cooperation. The combined experiences of the professionals who participated in this study might provide them and others with more insights into how others in the same professional area have dealt with barriers towards cooperation.

Related to communication, professionals have to keep in mind that the agreed medium, if any, is used to communicate incidents or request assistance from the organisation across the border. Furthermore, the national organisations of emergency services might have a look into the use of digital communication systems while a border is crossed in order to smooth communication among cooperating organisations. Language does not seem to be an issue, however, it may prove useful to have an interpreter present at formalisation meetings of agreements so that key-terms are not translated faulty and may pose problems later on. Organisational procedures have to be understood by professionals as a lack of following procedures may result in misinterpretation of needs. Cultural elements also have to be kept in mind as being offended or frustrated about another’s actions may be the result of the culture this person comes from. A higher understanding of each other’s culture may prevent offensive actions or frustration and prevent barriers from occurring.

Organisational factors most relevant to international cooperation seem to be the relational factors and geographical situation. More extensive cooperation may be sought in areas where mutual elements are able to pose threats to border regions, in addition, geographically close areas in which no or few cooperation takes place might be interesting to investigate on how these areas can be provided with the fastest and most adequate help there is, even if this would mean that emergency services from across the border are able to provide this care. Political influence has to be kept in mind as it is the politicians who will eventually sign off on some agreements. Data analysis
shows the participants are well aware of the potential influence this may have on international cooperation.

Furthermore, organisations which are not cooperating with their neighbouring counterparts may become interesting in this by looking into the resources they are able to provide to each other and complement each other’s services and even training of personnel. Lastly, when an organisation is largely involved or planning to become involved with international cooperation, it is important that there are individuals in both organisations who have the intention and see the benefits of the international cooperation as a whole and can possible motivate others inside the motivation to follow their lead. In addition, an extensive personal network may smooth international cooperation as contact lines do not have to be discovered from the ground up, eventually saving a time-consuming search to right ties.

6.4. Limitations

This research is subject to a number of limitations. The first limitation to address is that the researcher is a native Dutch speaker with a minimum of B2 level of German on the CEFR. Even though this can be considered as a fair knowledge of the German language, it may be the case that due to this fact interviews conducted in German are less extensive in nature.

Furthermore, the Dutch sample size is slightly larger than the German sample size (six versus four). The overall sample size is also relatively small, however, in the scope of this research there were not many additional suitable respondents to be considered. Also because this research is rather location specific in terms of the comparable nature in this research it would not have been of large additional value to extent the sample size to other nations or a larger border area.

The initial aim of the research was to investigate the international cooperation of police and fire emergency services in the Netherlands and Germany. Due to difficulties in arranging interviews with the police departments, only three police departments have been included in the study,
therefore it may be that the implications of this research only partly apply to the international cooperation of police departments.

National cultures can also play a role in the level of disclosure by respondents. Following previous research by Hofstede (1984) both national cultures are different in terms of individualism. The German culture is more collectivistic in nature which may result in less disclosure of information to outsiders, however, this has not been experienced in this way by the researcher. In contrast, Dutch culture is more individualistic in nature and this may result in more disclosure of information due to the general idea of greater trustworthiness in outsiders (Huff & Kelley 2003).

This research was focussed on the cooperation which takes place between the Netherlands and the German state of North-Rhine Westphalia. The Netherlands and North-Rhine Westphalia also share a border with the German state of Lower Saxony, which was not included in this study. Generalising results from this study towards the cooperation with Lower Saxony might pose issues as this state is rather different to North-Rhine Westphalia in terms of organisation of the emergency services and also population density in the direct vicinity of the border.

As this research was carried out within the European Union, generalisability to other parts of the world may prove to be difficult. Inside of a union of nation states where borders are faded away and cross-border cooperation, employment, movement and so on is facilitated through agreements of many nation states this research may apply. When confronted with a situation where borders are considered as larger barriers, this research may not apply.

Finally, the available prior research on this specific topic is rather scarce. Though, much prior research has been carried out in the larger scope of this research, therefore prior studies still had an additional value as they were combinable in the formulation of the interview questions and data analysis process.
6.5. Directions for Future Research

Future research may be conducted in the same professional area with the inclusion of Belgian emergency services (from a Dutch perspective), or in other geographical areas where two or more countries share a border. Also, additional research may be carried out with the inclusion of more police regions and even a wide inclusion of public health organisations may prove interesting. In addition, the framework may be tested outside of the European Union in order to compare possible differences which may arise from situations where borders are to be regarded as boundaries or barriers.

Further exploration of the field of international cooperation on more local levels through the means of qualitative research on perceptions of the neighbouring region may prove interesting. By conducting research in this way, it may provide more generalizable results for the organisations as an entity. Factors to be considered may arise from the discovered framework on international cooperation in this research.

It may prove useful to investigate the effects of language proficiency on the levels of disclosure by respondents and the allocation of trust to researchers who are not native speakers. In line with this, such research may be carried out in contrast to cultural elements. In essence, to investigate which factors, language or culture, prove to be most important in relation to disclosure of information and allocation of trust.

6.6. Conclusion

This study aimed to examine influential factors in the international cooperation between police and fire departments on a more local level. The research shows that factors related to communication, resources, organisation and personal elements are perceived by professionals as having an influence on the eventual cooperation outcome. This is in contrast to the contextual distances of international cooperation from previous research. The contextual distances were suitable to investigate the international cooperation of emergency services in a qualitative manner, however from data analysis a newly formed framework arose. In addition, it is argued that
differences among organisations in an international cooperative relationship can also be seen as facilitating instead of merely forming barriers to a positive cooperation.

In short and in response to the main research question of this research, facilitating factors of international cooperation are the similarities in shared elements, geographical situation and benefits which arise from the resources organisations have to offer each other. Problematic and limiting remain the factors related to communication such as the differences in culture, media and organisational procedures which have to be followed strictly in order to prevent misunderstandings from happening. Another major aspect is that international cooperation depends on the intention of professionals within the organisation as a lack of this may prevent international cooperation from taking place at all.
References


Consolidated version of the treaty on the functioning of the european union 222 C.F.R. (2007).


Appendix A: Summary of Comments

Communication

Media:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limiting</td>
<td>‘Recently there was a fire and the Germans tried to contact us via email which did not work. Eventually, it seemed to be that the DNS server was not set up right.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘The communication systems we had at that time were overloaded directly.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘It is technically possible to connect with each other over the mobile devices. Though, this has to be initiated by the contact centre who is responsible for this in the whole country.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘If you cross the border for 10 kilometres, you lose contact with your own control room. It is technically possible, though, costs are involved.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We do not use mobile devices as you might think, we use smart phones.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘Ne we cannot talk with the Dutch directly, only the helicopter has this possibility, or places where mobile devices are exchanged.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We then get a mobile devices from the Dutch, the technical properties are different.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We could arrange for a roaming functionality for emergency services that come here, however, on the other side of the border they should do the same to have this covered completely.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘I would be fond of a usage of each other’s database. This would bypass the structures we have now for requesting information.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘The control rooms communicate with each other directly via the Eurofrequency.’</td>
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</tbody>
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<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Limiting</td>
<td>‘Special terms within one subject often require translation through a translator. You saw that more needed to be translated from Dutch to German. I think the Dutch can understand German more easily than the other way round.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘This morning we had a translator present. Everyone present had a good understanding of German, however, you could still see the importance of the translator. Some words mean something completely different than the meaning we give to it.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘A limitation is the language for one part. On an operational level it is no issue, once you come in contact with organisations located further from the border, you have less connection to the Dutch language.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘Language can be difficult. We always try to speak our best German, some German colleagues speak Dutch. For some of my colleagues this could be seen as a barrier.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘German is still the main language. You see that many younger...’</td>
</tr>
</tbody>
</table>
colleagues speak less German, therefore I think that in 10 years we might be speaking in English.’

Neutral
‘The experience is that we talk a lot of German. Hardly any English, I have not experienced this yet.’

Neutral
‘I have experienced a few times that you agreed to talk in your mother tongue, if you then do not understand each other you can just switch to English.’

Neutral
‘I think it is not so much of a problem. In our region the dialect is similar to German and many people go to Germany regularly. It is not really an issue.’

Neutral
‘It may ease the operations in case you are able to speak a little bit of German.’

Neutral
‘German is the main language and most practical. Many people in our region speak German.’

Neutral
‘I do understand Dutch, though the further away from the border you go, the harder I am able to understand it.’

Facilitating
‘We have forms which can be filled in either French, German or Dutch. This provides us with clarity as we can click on the language of choice.’

Facilitating
‘The level of Dutch among the Germans is less. Close to the border, we speak Plattdütsch, which is also similar to Dutch. In the dialect an understanding can also be reached.

Facilitating
‘They often are able to speak German quite well. We, unfortunately, rarely Dutch.’

Organisational Procedures:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Limiting</td>
<td>‘The exchange of plans on how to combat incidents does not flow smoothly between organisations.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘They know the security region, however, I think that they would preferably have contact with the provinces, as we used to be organised with the involvement of the province.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘The fire department knows how to find each other. You know who is in charge, you carry out the same job. When you have to talk with administrators it may get more complicated.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We often get information requests concerning other regions within the police force. We then say that we do not treat such a request, however, we do forward the request to the relevant region and we will provide them with the answer.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘For us the cooperation with other German states is the same. Cooperation within Germany may prove more difficult due to the differences in structures of emergency services.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘With the restructuring of the Dutch security regions we lost a few of our previous partners.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We have fixed plans and procedures for requesting help.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We have rules which stem from the Schengen agreement and which have been partly integrated into the treaty of Enschede.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We have a system through which information requests are handled and, if there is enough evidence, shared with the authorities of the other country.’</td>
</tr>
</tbody>
</table>
Facilitating

‘By having regular meetings with the professionals and public figures relevant in international cooperation, we aim to exchange the information necessary to have the utmost outcome.’

Facilitating

‘We have our procedures, though it is sometimes more convenient to just take the phone and talk with the colleague from the other side.’

Facilitating

‘We receive a briefing from ... multiple times per week. This includes information on criminals or suspects who may cross borders with their activities.’

Facilitating

‘You have to get the people together who actually matter, who have information and who can say useful things about a certain subject.’

Facilitating

‘Requests for help are treated through the control rooms. Those are our ways and such requests have to be documented. It works in this way.’

Culture:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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</thead>
<tbody>
<tr>
<td>Limiting</td>
<td>‘Culture has a three way approach. Culture related to systems, culture related to the informal and culture in relation to language. You have to be aware of these approaches in order to have effective meetings and not unintentionally, maybe, offend someone.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘There is a difference in the communication of risks. We have an open risk map on which everyone can see dangers in their neighbourhood. Germany is more closed in this matter, I also think because if you open up on such information, property values will drop.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We do not know the crisis structures of the Germans that well. Also training we had in the past did not clear this up to us. Maybe a pool of liaisons may clear this up to us and smooth cooperation on this area.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘I often perceive as if some of the German colleagues who are present at meetings may have a higher understanding of a subject, but do not speak their mind. This may be because of the hierarchy.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘The cultural differences play a part in the cooperation. There is a huge variety of institutions which may get involved when you want to cooperate.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘It is always a small search with who you actually have to talk in Germany, they are slightly more hierarchical than us. Searching for someone who can actually make decisions may take time.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘Working towards meetings with the right people who are able to sign off on ideas and who may transform it to the operational level requires preparation.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘Germany seems a bit more closed. We have the provincial risk map, in Germany it seems that they are not so open about information exchange of risks.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘Sometimes you notice that not everyone at a meeting has an actual say. I sometimes wonder, also when the person who did not say anything may have more knowledge about a subject and is living in the area which is being discussed.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘German culture is more formal. The usage of the formal ‘you’ is a felt distance you may have.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘We do not have issues in cooperation between either North-Rhine Westphalia or Lower Saxony, I can imagine that in Germany they face’</td>
</tr>
</tbody>
</table>
more difficulties in cooperation across states due to the different structures. It is also strange that police gets control over the fire department during a crisis in Lower Saxony, if I am not mistaken’

Limiting
‘You have to discuss topics on the appropriate level. Discussing an issue on a local level and making agreements on this does not make sense when you can agree on such things on a national level.’

Limiting
‘You experience differences in hierarchy. We often send someone who is lower in hierarchy to a meeting than our colleagues from Germany do.’

Limiting
‘I cannot see what information they have about something or someone in another German state.’

Limiting
‘Information exchange with Lower Saxony does not flow better compared to the exchange with the Netherlands. It may be one country, but it does not mean that cooperation is better.’

Facilitating
‘Every two years there is a congress at the university of applied sciences in Bocholt and some have spoken about cultural differences. In general, I think it is not a problem, when you open yourself and when you actually want to do this, then it will work without any problems.’

Resources

Technical resources:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Facilitating</td>
<td>‘The THW, I think it is a great organisation which can help us.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘If you want to have exactly the same you have to have knowledge about it. In case you need a standard German rescue vehicle you have to know what they are capable of providing. I think we know this in border regions.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We used a Dutch army helicopter, a large Chinook from the air force to combat a fire in a natural reserve which is located right on the border. It also flew across the border, you have to agree upon this first, even though you can’t even see the border in a natural reserve.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘Traditionally, we had different connections on pumps. This issue was already resolved some 20 years ago.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The technical resources are similar. That the Dutch police uses smart phones is maybe an advantage, we still have to ask for information by contacting our control room.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘In the Netherlands you sometimes have more tailored vehicles, where possible it is nice to be served with this as well.’</td>
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</table>

Organisational resources:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Facilitating</td>
<td>‘They have a lot. That makes us somewhat jealous. Germany just has a lot and a lot at once as well (firefighters). We would like to have more of that.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘A good thing from the Dutch point of view is that we may be more efficient or have more tailored work. Nevertheless, when a classic disaster strikes, you need the manpower.’</td>
</tr>
</tbody>
</table>
Facilitating ‘In Germany they are capable of mobilizing hundreds of firefighters almost instantly, we have less manpower.’

Facilitating ‘Even though we are a strongly organised fire department, when a large disaster strikes, you need a good neighbour and the manpower.’

Financial resources:

<table>
<thead>
<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Facilitating</td>
<td>‘We have had projects with our German colleagues which were subsidised.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘In the Netherlands we have a strong financial consideration in relation to safety or security. This may also be the case in Germany, though they are somewhat more old-fashioned in terms of having more manpower and vehicles.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We are compensated for our volunteer work better. In Germany this is less, though they receive more recognition from businesses and informal events such as barbeques. When we have a training in Germany, we are often invited to such events as well.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The financial question is not as large as here in Germany. When someone in the Netherlands says, we need this, then it will be bought by the security region.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The cooperation is organised in a way that besides materials needed for combating a fire, there should not be any extra costs from cooperating with the Dutch.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘They are able to purchase materials because of the security region.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The Dutch are better paid than us. Here we hardly receive anything, but we might receive a bit more recognition.’</td>
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</table>

Organisational Factors

Operational factors:

<table>
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<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Limiting</td>
<td>‘We have a department called infrastructure, which relates to rail, road and other areas relating to infrastructure. In Germany they do not have such a department. When they want to talk about mobile criminal gangs etc. they look surprised when we refer such requests to our infrastructure department. It is another concept, you have to know this in order to cooperate with each other.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘There is a difference in approach towards offenses. In Germany they relate to legitimacy, which means that all offenses have to be punished. In the Netherlands we work more from the discretionary principle, meaning that we can discuss with the justice department if we should prosecute or not.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘In Germany they still attach value to automatic fire alarms. It is understandable also as in our case it affects a hospital. Where we are trying to limit our responses to such alarms, as sometimes there is nothing going on, they still attach value to it and want us to respond to these alarms in Germany as well.’</td>
</tr>
</tbody>
</table>
| Facilitating      | ‘We already have agreements for some places where both a German
Facilitating  ‘On an operational level we have a good cooperation. When something happens we will look at it from both sides.’

Facilitating  ‘We have agreements that when an incident happens near the border we will look into who is able to respond the quickest.’

Facilitating  ‘We have had an incident where a moor was on fire. Around 1000 firefighters were responding on each side of the border and this has done good to the cooperation as a whole.’

Facilitating  ‘We often have Euregional trainings.’

Facilitating  ‘Some time ago we had a fire in a cinema and needed the Dutch ladder truck and in 10 minutes it was here.’

Facilitating  ‘We often work together at festivals and also when demonstrations take place.’

Facilitating  ‘Common surveillance, especially in our region, is a point on which cooperation is being developed in a great way.’

Relational factors:

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<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Facilitating</td>
<td>‘We have made plans together with our German colleagues relating to vital infrastructure, air traffic and forest fires. All these risks might affect both countries.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘There are two shared elements here. First, the fire fighting in general, we have common forests, water areas in the Netherlands where we can provide assistance and also the straightforward incidents as rescues, traffic collisions and accidents. Those are points which occur the most and where our help is requested sometimes.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The river is a very relevant factor here. Also the forests which are located on the border may be a point of interest.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘You used to have the so-called neutral street which only had a connection with the Netherlands, even though it crossed German territory.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The similarity in criminal activity which can easily cross borders makes cooperation logic.’</td>
</tr>
</tbody>
</table>

Geographical situation:

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<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Limiting</td>
<td>‘From history, we have always cooperated with other regions in our province and neighbouring provinces. We are in that sense, somewhat less oriented on others.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘When you suddenly have to communicate with the state government in Düsseldorf, you experience a felt distance.’</td>
</tr>
<tr>
<td>Limiting</td>
<td>‘I think Niederrhein sees itself as a different region and Aachen has the same. Now we have two Euregions, couldn’t we merge them? I think you can forget that, and if you know this, you should not even try to do something like this.’</td>
</tr>
</tbody>
</table>
Facilitating  ‘From the history, that Aachen is directly on the German-Belgian-Dutch border, we already had a long history of international cooperation.’

Facilitating  ‘The road between Roermond and Brunssum used to be closed from the German side. West of this road, there is a part of Germany. Emergency services weren’t even possible to reach it, also because they did not have a health centrum there.’

Facilitating  ‘I think the relation with North-Rhine Westphalia is the most intensive. In the south you have the Euregion Meuse-Rhine which is urbanised. More north you reach Venlo, from where you are in the middle of the Ruhrgebiet in half an hour. Moving up even further than you have mainly forests, Enschede being an exception.’

Facilitating  ‘We have cooperate with each other on the motor way as it makes more sense to divide this on the part where it crosses the border. The Dutch will reach an incident faster on the southbound section and we will reach it faster on the northbound section.’

Facilitating  ‘You can consider our area as one common urban area. Suspects cross borders and we often talk about the same persons. Also the inhabitants of our region cross borders for shopping and other leisure activities.’

Political influence:

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<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tr>
<td>Limiting</td>
<td>‘You have the security regions, which are managed by the municipalities, which always have a say in things. You also have the province which cooperates internationally, the ministry of security and justice and also the Euregion, all which try to have a say. In Germany you have the districts, the state, national government and also the Euregion. You actually have a sort of spaghetti-network of actors which you have to oversee and which have to want the same in a small area in order to reach something, it can complicate things.’</td>
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<tr>
<td>Limiting</td>
<td>‘Relative to the administrative approach. We, for example, provide licenses to places such as bars etc. You can close these establishments if they are not in line with those licenses. In Germany this is not the case I think.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The state government signs off on agreements. We have close contacts to them as well.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘Control rooms inform majors. The major then has the informal choice of informing his colleagues across the border, but it is nothing more than an informal conversation and it is not registered.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘We have a provincial commission of several institutions. This commission now also has a German representative.’</td>
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</tbody>
</table>

Personal Factors

Intention:

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<tr>
<th>Nature of comment</th>
<th>Paraphrased comment</th>
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<tbody>
<tr>
<td>Limiting</td>
<td>‘We used to have a project which lasted some years. After this project, one of our partners needed some time and did not want to focus on just one subject area.’</td>
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<tr>
<td>Limiting</td>
<td>‘It depends on the person. If you do not invest time into the international cooperation you should not expect to get something out of it.’</td>
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<tr>
<td>Limiting</td>
<td>‘You should have the right intention on the right level. Intending to cooperate on a local level when there are agreements on higher levels does not make sense.’</td>
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<tr>
<td>Facilitating</td>
<td>‘Why wouldn’t you help them? The civilians are just looking for the quickest help they can get. We are starting to understand this now.’</td>
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<tr>
<td>Facilitating</td>
<td>‘He has the time and intention to develop cooperation further. We also develop the cooperation, though a little bit less than him.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘The advantages of international cooperation are only seen when an incident has occurred. Therefore it is of importance to work with our neighbours just in case something happens and we might need them or they need us.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘I think that the essence of cooperation is higher for the Dutch. We are somewhat more innovative, more efficient, but we have less personnel. There is an essence to work together with the Germans.’</td>
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</table>

Personal Network:

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<thead>
<tr>
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<tr>
<td>Limiting</td>
<td>‘I have the idea that the success of cooperation depends on the person. When you have a good network, you know who to contact.’</td>
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<tr>
<td>Limiting</td>
<td>‘People work there on a certain position. You cannot just change these people, only when someone else should be filling their position.’</td>
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<tr>
<td>Limiting</td>
<td>‘Younger colleagues see the border as a barrier, they should just call and contact their colleagues in Germany in case they have a question or issue to deal with.’</td>
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<tr>
<td>Facilitating</td>
<td>‘The person who has to conclude agreements has to get the right people together.’</td>
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<tr>
<td>Facilitating</td>
<td>‘The fire department knows who to contact. Talking with administrators makes it more complicated due to difference in structures, you have to know this.’</td>
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<tr>
<td>Facilitating</td>
<td>‘Through regular meetings you get to know your colleagues. Also on an operational level I think it is important to know with who you might have to cooperate.’</td>
</tr>
<tr>
<td>Facilitating</td>
<td>‘I have a fixed contact person who I can always call and arrange meetings or visits for interns of my department.’</td>
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