Master Thesis Design For Interaction

Watch it! Resident on the lookout

Design of a support service for neighborhood WhatsApp groups to improve safety

Elke Wennekers | 2018

Colophon

Master Thesis - Graduation Project

"Watch it! Resident on the lookout: Design of a support service for neighborhood WhatsApp groups to improve safety."

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"If we only take a walk on sunny days, we never reach our destination."

— Paulo Coelho

Preface

The words that come to my mind when thinking about this project are: it was a hell of a ride. I've had my ups, downs, banged my head against the wall and have had numerous breakthroughs. It has been fun to dive into practice with all knowledge acquired during my studies and see what I can use that for. The project confirms that huge improvements in the relation between governments and citizens can and should be made, and that human-centered design is necessary to do so.

First of all, I want to thank all the people that I interviewed throughout this project for their time and effort. The insights you gave were essential for the results of this project.

I would never have thought of doing this project, if Geertje would not have got me in touch with Erwin from the municipality of The Hague. Talking about Erwin, thank you for your patience and the guidance throughout the past months. Without your confidence in me from the start, I would not have finished the project. Furthermore, thanks to everyone from Public Order and Safety that made me feel at home there. Frances, thank you for the critical notes and the occasional pep talk.

Getting back to TU Delft, many thanks to my chair and mentor. Jasper, for encouraging me to 'do something' and your willingness to explain things. Stefan, you made me relect upon myself throughout the project, and made me stronger. Thanks for provoking me from time to time.

Last but not least, I want to thank several people around me. First, mom, dad and Jelle for letting me have great student days and pulling me through when I had given up. Marcus, for his patience and help. De Trein, for activities to distract my thoughts from my graduation project. Lana, for engaging in the same adventure at the same time. Lisa, for her understanding. All other people that have helped me: thank you!

Executive summary

In the coalition agreement (May 2018) the municipality of The Hague has expressed that they want to support neighborhood WhatsApp groups (NWAG's). The goal of providing support is to increase citizen participation and to improve neighborhood safety and safety feeling.

Currently, there is no city-wide approach for supporting NWAG's. So, the question is: how to set up a support structure for the long-term success of NWAG's? This is answered in this design project and supported by the research conducted throughout the project.

To set up a successful support structure, insight were acquired into the desires for support and the contributions of support given in other municipalities. The difficulty for police and municipality is that they have many assumptions regarding giving support to NWAGs. Even though these assumptions are either nonexistent or resolvable in reality, they hold back the police and municipality in starting to give (parts of) the support residents desire.

The research also showed that support is very desirable for residents. The number of residents starting and maintaining a NWAG increases when any form of support is given. Residents want to receive tools for starting a NWAG and want to exchange information with the police and municipality about their neighborhood. Residents find it evident and obvious that the municipality would support NWAG's in this way, and do not understand why this is not the case yet.

The coordinator of a NWAG has a central role, as he manages the NWAG. Therefore, the design goal was to create support for coordinators. The principle of making a ward WhatsApp group (WWAG) is used, because that group contains all coordinators in a ward, a municipal official and (ward)

police. The focus is on helping residents to start a NWAG, to connect coordinators to the WWAG and to outline what the WWAG should do.

Based on the user research, the following design guidelines were set up for providing support to coordinators:

1. Keep information as well as activities about safety-related topics.
2. Present information and activities straightforward, so that the purpose is evident.
3. Aim to include coordinators in decision making about WWAG setup and execution of certain tasks that maintain the WWAG.
4. Do not impose obligations for coordinators to become a member of the WWAG.
5. Make clear agreements between all WWAG members for mutual understanding.
6. Show appreciation for coordinators in person.
7. Provide practical tools that support coordinators, mainly in the starting phase.

The created support service consists of twelve touchpoints. Touchpoints are means to create interactions between coordinators and the support service. The touchpoints show the minimum means the municipality should use to provide support to NWAG's.

The support service helps residents to contribute to a safe neighborhood to live in themselves. This increases participation of residents as well as municipal and police officials in the neighborhood.

This report shows the process of developing the touchpoints and explains the guidelines and touchpoints in detail, as well as elaborating on the implementation of the touchpoints.

Contents

Part 0

Chapter 1 **Introduction** 1

1.1 Project relevance 2
1.2 Problem statement 3
1.3 Project setup 4
1.4 Reading guide 4

Part 1

Chapter 2 **Design context of digital neighborhood communities** 7

2.1 Method 8
2.2 Digital neighborhood communities 9
2.3 Stakeholders in DNC's 10
2.4 DNC platforms 12
2.5 Participatory initiatives that improve neighborhood security 16
2.6 Conclusion 17

Chapter 3 **User research into the use and experience of neighborhood WhatsApp groups** 19

3.1 Research setup 20
3.2 Insights 22
3.3 Limitations 32
3.4 Conclusion 32

Chapter 4 **Design brief** 35

4.1 Design goal 36
4.2 Scope 36
4.3 Interaction vision 37
4.4 Preliminary design guidelines 38
4.5 Conclusion 39

Colophon i
Preface iii
Executive summary iv

Part 2

Chapter 5 Design development and evalution 41
- 5.1 Ideation 43
- 5.2 Design proposal 45
- 5.3 Evaluation of design proposal by coordinators 48
- 5.4 Evaluation by client 56
- 5.5 Conclusion 57

Chapter 6 Guidelines for providing support to neighborhood WhatsApp groups 59

Chapter 7 A support service for neighborhood WhatsApp groups 63
- 7.1 Service design 64
- 7.2 Service design 64
- 7.3 Touchpoints 65
- 7.4 Support service implementation 86

Part 3

Chapter 8 Conclusion 89
- 8.1 Conclusion 90
- 8.2 Limitations 92
- 8.3 Recommendations 92

List of terms 94
References 95
Contents of appendix 97

Chapter 1

Introduction

This report presents the process and results of the graduation project for the studies Design for Interaction at Delft University. The project is about how the municipality can support the participatory initiative of digital neighborhood communities in order to increase safety. The department Public Order and Safety of the municipality of The Hague commissioned this project as a part of the BART project (Burger Alert Real Time). This chapter presents the project relevance, its starting point in the problem statement and the project goal and approach. Closing this chapter, a reading guide is shown to help reading this report.

1

◀ Fig. 1 – City hall of the municipality of The Hague (own photo)

1.1 Project relevance

"We find residential initiatives for safety important. We will remain to support from the city districts residential initiatives that contribute to the safety and livability of neighborhoods in The Hague, think about street- or neighborhood intervention teams, night- and street representatives, neighborhood WhatsApp groups."

"With tackling high impact crime, we make use of the neighborhood WhatsApp groups."

— Both from *Den Haag, Stad van Kansen en Ambities* (2018).

The coalition agreement shows the interest of the municipality in supporting participatory initiatives that improve safety, social cohesion and livability in the neighborhoods (fig. 2). The first attention to digital neighborhood communities (DNC's) in the media came around 2014 (de Vries, 2014). Akkermans (2015) pointed out with a research that security in neighborhoods improves when residents use neighborhood WhatsApp groups (NWAG's) (Akkermans & Vollaard, 2015). The website WABP.nl that aims to map all the NWAG's in The Netherlands, more than 8500 NWAG's have signed up. This means that at least 630.000 people are a member of an NWAG in the Netherlands (Niessen & Nap, n.d.).

The municipal support for participatory initiatives is part of a movement where power shifts from the municipality to citizens. The Action Plan Citizen Participation 2016-2020 shows that one of the reasons to embrace participation of citizens is bridging the gap between the organizational world of the municipality and the societal reality in the city (Gemeente Den Haag, 2016). Another reason to strive for more participation in the field of safety is the decrease in resources the police and the municipality have. This means that residents have to be able to supervise their neighborhood.

1.2 Problem statement

definitions

"Safety is the freedom from, or resilience against, potential harm from external forces" (*"Security,"* n.d.). There is a difference between objective safety showing the factual presence of a threat and subjective safety showing how threatened people feel (van Dijk, 2015).

Social cohesion is the connection and bond between residents in a neighborhood (de Hart et al., 2002; Ministerie van VROM, 2004).

Livability tells how the environment is perceived by people (Leidelmeijer et al., 2004). Good livability means that people are satisfied with their environment. Social cohesion and security are both aspects of livability (Dorst, 2005; Leidelmeijer et al., 2004; Ministerie van VROM, 2004). All aspects of livability influence each other, so that causality is not always clear in the domain of livability.

Fig. 2 – definitions of safety, social cohesion and livability.

Over recent years DNC's emerged throughout The Hague and the Netherlands. The purpose of these groups is to improve security, social cohesion and/or livability in the neighborhood by connecting residents.

The municipality of The Hague sees that certain DNC's are very successful in achieving their purposes. They thus have the desire to start supporting DNC's. However, the municipality currently has no city-wide approach towards giving support to DNC's. This results in not providing any support, for instance by promoting DNC's or giving subsidies to existing DNC's.

When the municipality would start to support groups, it is important that this helps DNC's and residents. For this knowledge about why communities exist and how communities are used is necessary, but this knowledge is not yet available. Therefore, the municipality does not know how to support digital neighborhood groups.

1.3 Project setup

1.3.1 Project goal

The goal of this project is to find out how the municipality should support DNC's. For this, research into how DNC's are used and experienced is necessary, to reach better understanding of why DNC's exist and are used by so many people. That information can be used to design support for DNC's.

1.3.2 Project approach

The project is approached in two main phases, following the double diamond approach (Buijs, 1984). The first phase is about exploring the context and finding out about the use and experience of digital neighborhood communities. Insights are generated and lead to a preliminary design brief. In the second phase, design directions are explored and evaluated. The final design is developed based on the evaluation. The phases are shown in the chapter overview in figure 3.

1.3.3 Project context

This project is executed as a side project to the BART project. In BART (Burger Alert Real Time, translated to Citizen Alert Real Time) the municipality of The Hague and the police work together to set up a sustainable participation system between government and citizens. The goal is to improve the quality of life and specifically the security in the neighborhood. With making a participation system self-reliance and social cohesion in the neighborhood are increased.

1.4 Reading guide

The report is built up in four parts (fig. 3). This introduction has shown the relevance of the project, the problem definition and the project setup.

Part 1 is about context exploration. This is first done in chapter 2 by mapping the design context and in chapter 3 by a research in the use and experience with DNC's. Based on this information, the design brief is formed in chapter 4.

Part 2 shows the concept development. It starts with the development of the design and evaluating that design with users and client in chapter 5. Chapter 6 shows the design guidelines for providing support for NWAG's, based on the user research in chapter 3 and the user evaluation in chapter 5. Chapter 7 shows the final product of this project: a service design for supporting NWAG's.

Chapter 8 concludes the project and shows recommendations for the municipality and for further research.

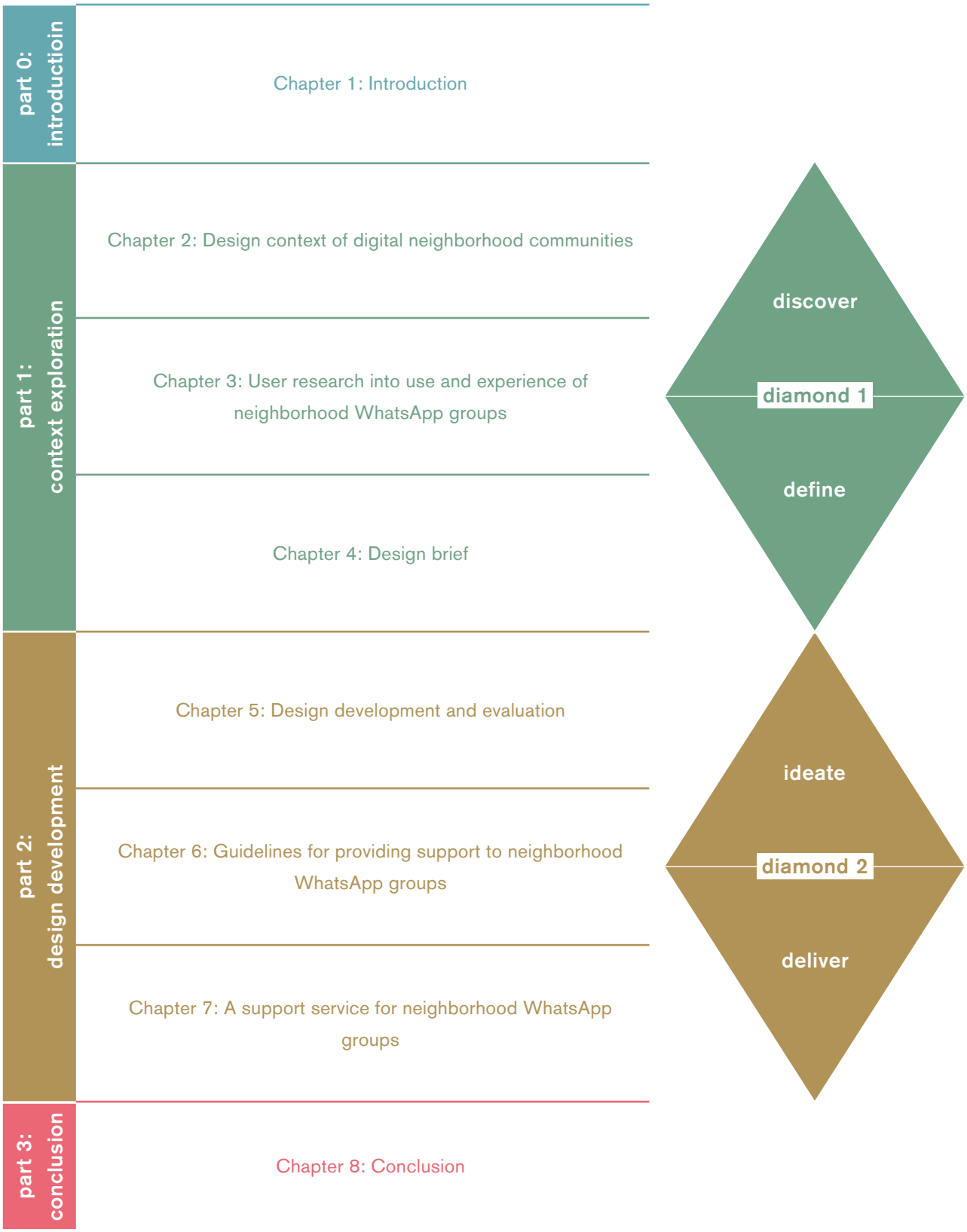


Fig. 3 – Project and chapter overview

Tele2 NL
11:04
mijnbuur
Burgernet
Verbeterdeb...
BuitenBeter
WeAlert
WaakSamen
LAS
Facebook
BuurtApp
Nextdoor
Veiligeburt
WhatsApp

Chapter 2

Design context of digital neighborhood communities

The municipality of The Hague wants a way to support digital neighborhood communities (DNC's). For this information about why and how DNC's are used is necessary. In order to set a scope for research into use and experience of DNC's, the context of DNC's is mapped. The method for doing this is presented at the start of the chapter, followed by a description of what DNC's are. The context includes stakeholders of DNC's, platforms in which DNC's can be set up and other participatory initiatives that improve safety. In chapter 3 the context information is used to set a focus for exploratory user research.

2

◀ Fig. 4 – Phone with several DNC platform apps installed (own photo)

2.1 Method

In order to retrieve information about the design context, literature research was done alongside interviewing several experts on the topic of DNC's.

Literature research comprised of reading news articles, studies and reports of several sources (BART-projectteam, 2015; Centrum voor Criminaliteitspreventie en Veiligheid, 2018; de Vries, 2016a; 2014; 2016b; 2016c; de Vries et al., 2016; Elings, 2017; van Damme, Graven, van de Ven, & Louhichi, 2018).

The interviews were open-ended. Before the interviews, several questions or topics to discuss were written down. Participants in these interviews were found through the network of the supervisor of the student, and then through snowballing (table 1). Appendix A presents what is discussed in each interview shortly.

Participant	Description
1	Policy advisor at Public Order and Security for the municipality of The Hague. Works on making DNC's.
2	Researcher and advisor in the area of social media and social security. In private life coordinator of a WhatsApp prevention group.
3	Police officer responsible for the BART project within the police.
4	Police officer at a Basisteam (police station) in The Hague. Established and manages as network of coor-dinators of WhatsApp prevention group.
5	Employee at municipality of Sint-Michielsgestel. Leads the BIN-project by finding BIN coordinators.
6	Ward Agent Citizen Participation at a Basisteam (police station) in Den Bosch. In this function is leading the BIN-project from the side of the police. Is in touch with coordinators of the BIN-network.

Table 1 – Participants in exploratory interviews

2.2 Digital neighborhood communities

One of the ways in which neighbors communicate with each other digitally is via digital neighborhood communities. These communities are better known as neighborhood prevention groups, WhatsApp neighborhood groups, neighborhood network, Nextdoor groups or by other used platforms. These names usually include *"group"* or *"network"*, a reference to *"neighborhood"* and sometimes a reference to the platform that is used for the group setup. In this report, the term digital neighborhood communities (abbreviated to DNC's) is used to refer to groups and to networks of groups.

DNC's stretch over one neighborhood, but what defines the borders of the neighborhood area? There are two main ways to define the neighborhood area. The first way is defined by looking at a neighborhood based on historic or urban planning characteristics (*"Begrippen,"* n.d.). The neighborhood is often the smallest unity used by government services to talk about an area (fig 5).

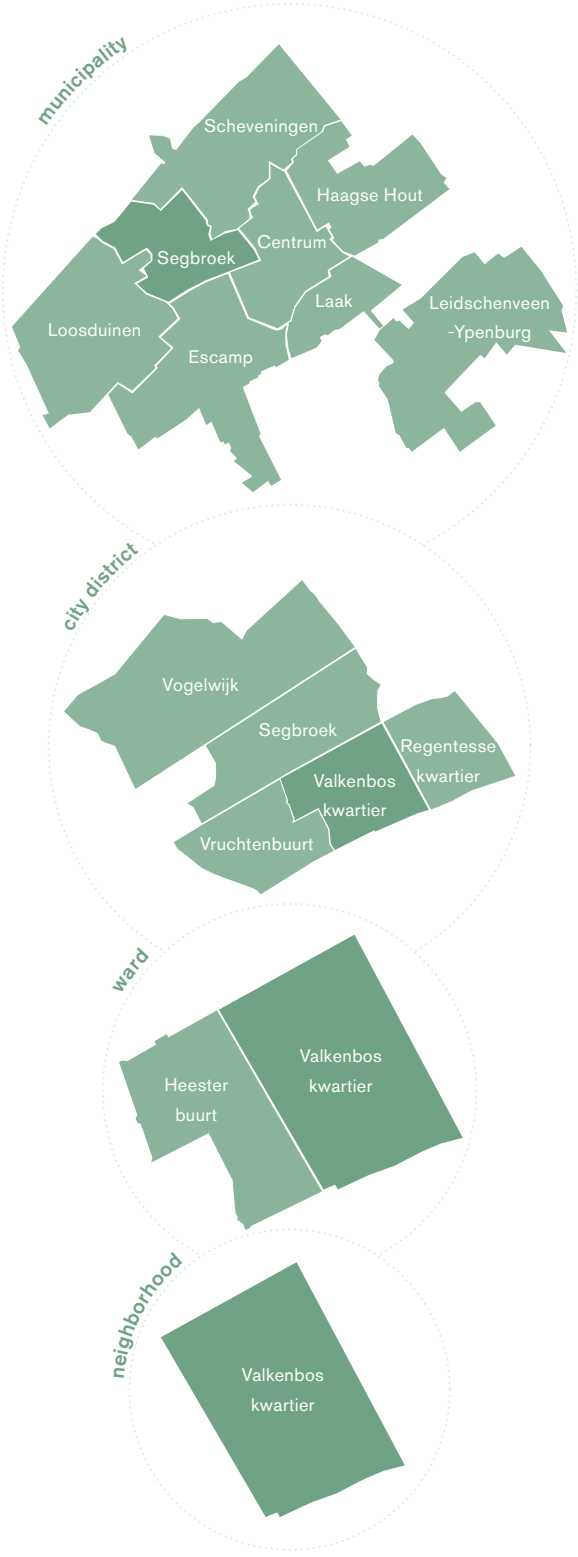


Fig. 5 – Within municipalities consisting of large cities, often city districts are used to split up the internal organization. The Hague has eight city districts. We will look at the district 'Segbroek' as an example. This district is divided into five wards. The ward 'Valkenboskwartier' consists of two neighborhoods. The neighborhood consists of multiple streets, and those streets consist of houses.

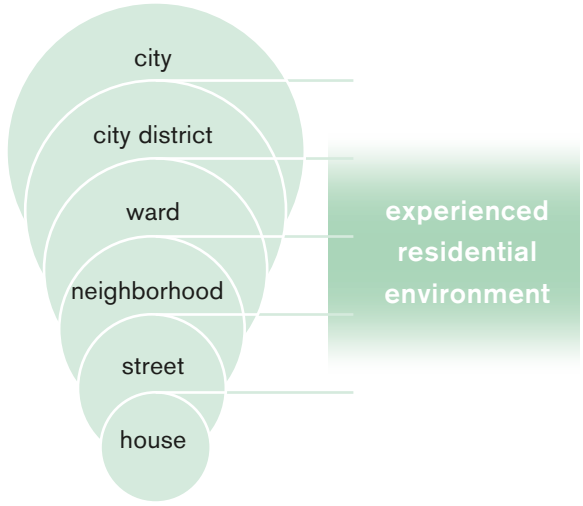


Fig. 6 – Size of a residential environment

The second way uses neighborhood to what citizens view as their residential environment (Dorst, 2005). This area does not necessarily correspond to a neighborhood or ward. The residential environment often corresponds only with a part of that area, sometimes as small as a few houses around the resident, but in some cases takes up an entire ward. The residential environment is thus based on the context the resident uses it in (fig. 6).

DNC's have mostly been initiated by citizens. When the government initiates DNC's, they often grow as to networks of groups, connecting multiple areas together. In the case it is initiated by residents, one or a few neighbors take upon themselves the task to set up and manage the DNC. They (initially) do not have a connection with other areas.

Within DNC's, neighbors communicate about topics of relevance to the neighborhood. Examples of topics are: requests for a babysitter, inquiries if someone has seen a lost cat, advertisements for local businesses and real-time following a suspect on the run after a burglary. What members find of relevance differs per DNC and platform they use for that DNC.

2.3 Stakeholders in DNC's

2.3.1 Relevant stakeholders

To find which stakeholders are relevant for the project, all stakeholders have been mapped in a stakeholder circle (fig. 7). The stakeholder circle shows the influence of the stakeholders on the existence of DNC's. Those closest to the middle have the ability to stop the DNC. The stakeholders are the following:

- Residents that live in certain neighborhoods. There are two subgroups:
  - Coordinators are residents that take upon themselves the task of setting up and managing a DNC.
  - (Potential) group members are the remainder of the residents.
- The municipality that the residents live in.
- The police of the police station that manages the neighborhood the residents live in.
- Platform owner is a person or organization that owns the platform that is used. They decide what functions the platform has.
- Social work, neighborhood associations or committees can take part in setting up and managing a DNC or can influence what the DNC does or does not do.
- Other initiatives that improve neighborhood security influence the DNC, because they try to solve the same problems, or have a similar approach to DNC's.

For this project residents, the municipality and the police are the most relevant stakeholders. Platform owners can kill their platform, but as people could simply use another platform, they do not have the ability

Fig. 7 – Stakeholder circle representing the influence of stakeholders on the digital neighborhood communities (based on (Bourne & Walker, 2005))

to stop a DNC. Social work, neighborhood associations, and committees can have a positive influence on starting the DNC, but residents are necessary to maintain it. Other initiatives that improve neighborhood security can profit from the information accumulated in DNC's and vice versa but have marginal influence on the existence of DNC's. Appendix B shows the roles and interests of the three most important stakeholders.

2.4 DNC platforms

2.4.1 Factors determining DNC setup

Several apps and web services offer a way for residents to communicate with each other digitally. WhatsApp, Nextdoor, Veiligebuurt, email, Facebook, and MijnBuur are a few of these platforms. In order to compare platforms, six factors that determine the DNC setup are introduced based on the most important differences between DNC's (appendix C).

1 Network options

Important to notice is that DNC's can be a stand-alone group for one neighborhood or a part of a network of groups. A network can roughly be set up in two different ways: by giving members the possibility to be a part of multiple DNC's or by having a representative or coordinator for each DNC and connect them together (fig. 8).

2 Rules

Communication in DNC's is often restricted to alerts when the goal of the community is just to improve security. There are rules so that topics are restricted to issues all residents find important. If the DNC's goal is to improve social connections in the neighborhood, topics of communication are often much broader then safety.

3 Roles

The DNC consists mostly of residents. It can also have one or a couple of coordinators. The police and/or municipality can be connected directly to the DNC, or to the network of groups.

4 Interactions

In DNC's there are often certain rules describing the interaction between different roles. Some are direct, for instance from resident to resident when they are allowed to communicate with each other. Some are indirect, for instance when a coordinator passes on information from government to residents in a network. And lastly, some interactions do not happen at all, for instance when a coordinator is not allowed to send messages to the police via the network group.

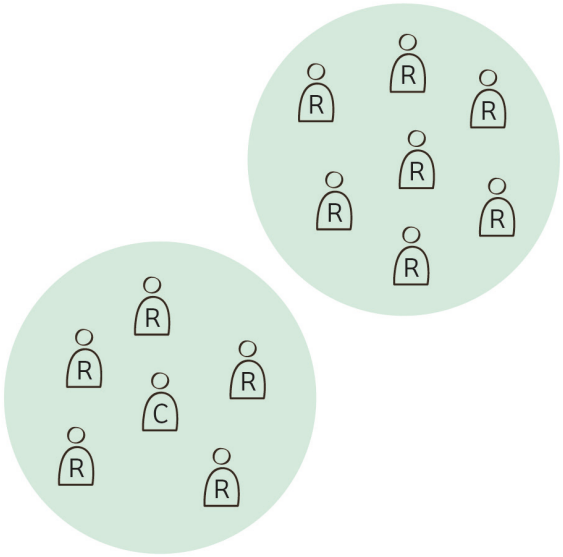
5 Coordination

Coordination is about managing who gets access, helping members and sometimes passing on information from the network to the group and vice versa. For example: in WhatsApp a resident is the coordinator of a group, and Veiligebuurt does not have a coordinator, as the management of the community is done by the platform itself.

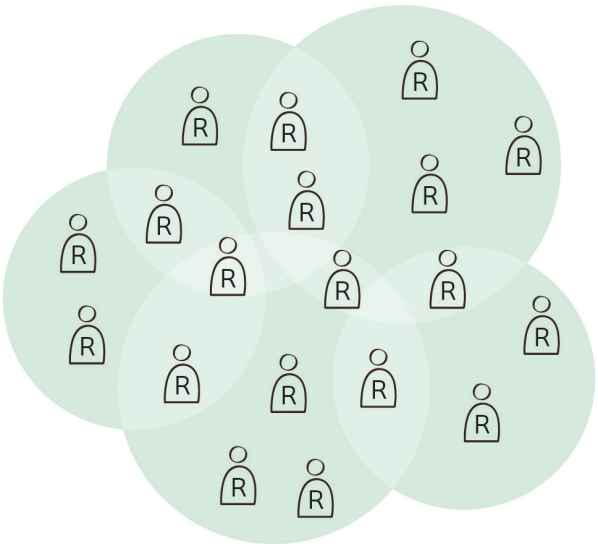
6 Covered area

DNC's cover different areas, depending on whether they use a governmental or a residential perspective to define this area (see paragraph 2.1.2). Describing the area helps to define the community in relation to others. A division between the area of a group and the whole network is made.

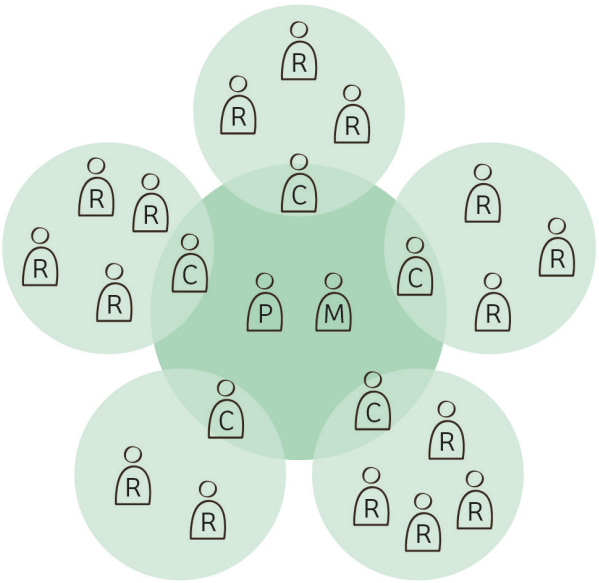
Fig. 8 – Comparison of network options of digital neighborhood communities (R=resident, C=coordinator, P=police, M=municipality)



Network option 1:
the group just covers the residential area of the members without a network.



Network option 2:
members can become a member of multiple groups in a larger area.



Network option 3:
multiple groups are connected through a coordinator.

Fig. 9 – Comparison of different DNC's on network setup (y-axis) and rules (x-axis)

2.4.2 *Comparison of different platforms*

To compare different platforms, all platforms are mapped on a matrix using the first two factors described in the last paragraph. Figure 9 shows the network options on the y-axis, and the rules on the x-axis. In appendix C you can find a full description of all compared DNC platforms.

Individual groups and groups connected through a coordinator are almost always formed by appropriation of WhatsApp or Facebook for DNC's. Appropriation means that the meaning, use and/or structure of a technological resource is changed to form a new product (Eglash, 2004). WhatsApp and Facebook are not built to have sub-groups to a bigger group, so that connection to a bigger network has to go through the coordinator. DNC's that are set up in platforms dedicated to being a DNC, often rely on a *"subscription"* of members to a bigger area. What also stands out, is that as soon as the topics are openly discussed, there is no example of a platform that has connections to subgroups through a coordinator. This could be because the coordinator is necessary to restrict the messages to alerts, and this function is less apparent and necessary in the case the topics are left open.

There are three platforms that are of higher interest to the municipality, because they are most used in The Hague and throughout the Netherlands (Coppens, 2018). These platforms are WhatsApp, Veiligebuurt, and Nextdoor. They are compared in appendix D, and the most important aspects of each platform are shown in the right column.

WhatsApp

Residents use WhatsApp groups to communicate with neighbors, that can see each other's phone number. A maximum of 250 people is allowed, which makes it usable for a group in the direct environment of residents. There are two options for groups: the so-called social group and the alert group, restricting messages to safety alerts.

veiligebuurt.nl

Veiligebuurt is an app focusing on alerts between neighbors. One group uses the area of a neighborhood as defined by the government, but residents can become a member of multiple areas. The app does not ask for personal details for an account to guarantee the privacy of members.

Nextdoor

The app Nextdoor focuses on social interactions between residents. The standard group uses the neighborhood area as defined by the government, with the option for residents to join multiple areas. Nextdoor verifies that members live in the neighborhood before they get an account and shows this address in the app.

2.5 Participatory initiatives that improve neighborhood security

There are other participatory initiatives that improve neighborhood security in the residential environment than DNC's. Several initiatives were found through the website of the Centre for Criminality prevention and Security (Centrum voor Criminaliteitspreventie en Veiligheid, n.d.). In appendix E you can find an overview of what goal of the initiatives is and how they work. Initiatives can be compared using the seven categories of participatory initiatives that improve neighborhood security (van der Land, van Stokkom, & Boutellier, 2014).

The initiatives that are closest to DNC's based on the categories are Buurtpreventieteam (BPT), Burgernet and BIN (Buurt Informatie Netwerk). Buurtpreventieteams are teams of citizens that patrol their own neighborhoods, in order to prevent crime and annoyances in the neighborhood (fig. 10). They get direct contact to government officials to make reports of issues. Burgernet offers a way for the government to request information from citizens about certain issues close to where the citizen is. BIN offers information provided by the police and municipality and spread by volunteers over email. BIN is also used by residents to send information by to the police and municipality by email. The BIN email network is completely anonymous so that residents connected to BIN are not known to the volunteers and the government.

BIN and Burgernet offer no way for residents to communicate directly with each other like DNC's do. A BPT gets residents in touch with each other but offers no way to supply extra information to them as is the case in DNC's. A BPT also is focused on getting a select dedicated group of residents, instead of focusing on involving as many residents as possible.

The BIN network is often also seen as a neighborhood community. This is not the case in this thesis, because there is no communication between residents possible through BIN. BIN is very interesting to the municipality of The Hague because it offers a local way to gather anonymous information by making use of a very accessible email system.

Fig. 10 – Neighborhood prevention team

2.6 Conclusion

The design context of DNC's is shown in this chapter. The information for this chapter was found through literature research in combination with talks with experts.

The research should focus on WhatsApp groups that aim to improve safety, because it is one of the most used DNC platforms in The Hague, and because it uses the area residents perceive as their direct environment for the size of the DNC. The other most used platforms in The Hague, Nextdoor and Veiligebuurt respectively have no focus on safety and are set up in an area that is marked *"neighborhood"* by the authorities.

This chapter also lined out the main stakeholders in DNC's: residents, the municipality and the police. Preliminary insight into their use and experience is acquired, but more in-depth knowledge and understanding is necessary before designing support for NWAG's. To design support is also helpful to look at how different platforms support their users (Veiligebuurt, Nextdoor) and how other participatory initiatives that improve safety are supported by the municipality (BIN). This should be considered in setting up the research.

Chapter 3

User research into the use and experience of neighborhood WhatsApp groups

Chapter 2 described the design context of digital neighborhood communities (DNC's) and set a scope for the research. This chapter gives insights into how residents, coordinators, municipalities, and police use and experience neighborhood WhatsApp groups (NWAG's) that aim to improve safety. These form the basis for the design brief presented in chapter 4.

3

◂ Fig. 11 – Participant during user research, on the foreground the sensitizing booklet used before and during the interview (own photo)

Table 2 – Participants in user research

Participant	1	2	3	4	5
Occupation	Working	Pension	Pension	Working	Working
Stakeholder	Citizen	Citizen	Citizen	Citizen	Citizen
Platform	WhatsApp	Nextdoor	WhatsApp	WhatsApp	WhatsApp
NWAG role	Coordinator	Not applicable	Member of NWAG	Coordinator	Member of NWAG
Location	Den Haag	Den Haag	Den Haag	Den Haag	Den Haag
Network	No network	No network	Coordinators & police	Coordinators & police	Coordinators & police

3.1 Research setup

3.1.1 Research goal

The goal of this research is to find out more about the use, experience and context of NWAG's, in order to find out how and why they work. The results will be used to design support for NWAG's.

3.1.2 Research questions

In order to reach the goal, four research questions were formulated:

- Why do people use NWAG's?
- How do people use NWAG's?
- How do people experience NWAG's?
- What are the issues with using NWAG's?

3.1.3 Participants

A total of ten participants took part in the research. A screener was used to make sure participants from each stakeholder group (residents, coordinators, police and municipality) and from different NWAG setups would take part. Appendix F shows the full screener. Table 2 shows the details of all participants.

3.1.4 Research setup

The research consisted of two main phases:

1. Citizens are not expected to think daily about the topics regarding neighborhood livability, social cohesion and security. To let the interview be as in depth as possible, and reveal their underlying desires, dreams and fears, the sensitizing method is used (Visser, Stappers, van der Lugt, & Sanders, 2005). Citizens will receive a booklet one week before the interview, together with materials to fill in the booklet (appendix G.2). The booklet initiates their thought process about how they use and experience the group.
2. An interview is held with the participant of 1 to 1,5 hour to go in depth into their experiences with neighborhood security and digital neighborhood communities. The interview uses a topics guide as a checklist to make sure all relevant topics are discussed (appendix G.3). The topics in this guide are derived from the insight into the roles and interests of relevant stakeholder groups (appendix

6	7	8	9	10	Participant
Pension	Unemployed	Ward agent	Public order & security	Specialist wardcare	Occupation
Citizen	Citizen	Police	Municipality	Police	Stakeholder
BIN & WhatsApp	None	WhatsApp	WhatsApp	WhatsApp	Group
Coordinator of NWAG	Not applicable	Discuss with coordinators	Put coordinators in right network	Supply information to coordinators	NWAG role
Berlicum	Den Haag	Amstelveen	Zoetermeer	Zoetermeer	Location
Coordinators & police & municipality	Not applicable	Coordinators & police	Coordinators & police & municipality	Coordinators & police & municipality	Network

B). At the beginning of the interview an agreement form is signed by the participant and the researcher (appendix G.4). Figure 11 shows the interview setup. Appendix G shows the full research design.

3.1.5 Retrieved data and data analysis

The interview is recorded on video and audio. From the participating citizens the sensitizing booklet is collected. The first impressions about the character of the participant for each participant are in appendix H. From each interview the interesting quotes were paraphrased and written down. Appendix I shows the documents with these paraphrases. With the statement card method from context mapping (Visser et al., 2005), paraphrases were clustered. The clusters formed insights into the use and experience of communities. The issues with communities were mapped in a table, together with their causes (appendix J).

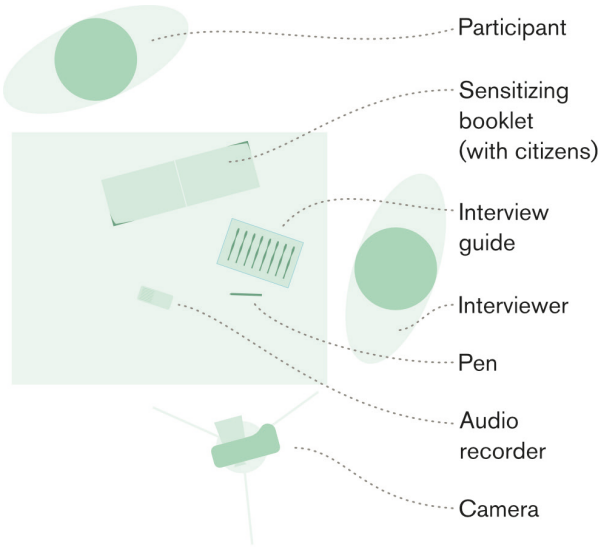


Fig. 12 – Interview setup

3.2 Insights

This paragraph answers the research questions posed in paragraph 3.1.2 for the main roles in NWAG's (more about these roles can be found in paragraph 2.2):

- Residents
- Coordinators
- Municipality and police

The next sub-paragraphs show the insights into why these roles make use of NWAG's. To present the insights into the use of, experience and issues with NWAG's, a user journey was developed for each role. The user journey describes the phases the user goes through. Because the police and municipality have a similar role as supporters of the NWAG's, the insights for those groups are combined.

3.2.1 Residents

Why residents use NWAG's

The most important reason for residents to use a NWAG is that they want a safe and secure neighborhood to live in. They want the neighborhood to be free of criminal activities and they want a clean and safe public space. Residents have six underlying desires in realizing the neighborhood they want to have.

Be alert

Residents find they have to be alert towards issues. When they are alert, they know how to guard themselves and what to look out for. Being alert is a result from knowing what is going on and getting feedback on earlier events. Because residents are more alert, they can better act upon what they see, and the social control will increase. Residents make more alerts with the government that make sense.

Interviewer: ***"How would it be to have a NWAG for your apartment building?"***
Participant 7: ***"Well, that would not be a bad idea, to notify everyone with one message. Then everyone is alert to what is happening in this building."***

Perceivable social control

Residents want to have a healthy relation to their neighbors and a neighborhood where people watch over each other. NWAG's make it easier for residents to get in contact with their neighbors. They can reach their neighbors at any given moment and know instantly when something is going on in the area around their house without being at home. When neighbors alert things in the NWAG, members can actually see that there are people monitoring what is going on, which makes them feel safer.

Participant 4: ***"Throughout the years neighbors have become more anonymous, they sit more inside behind their computer, people used to go outside and have a chat... And the WhatsApp puts that right a bit."***

Know what is going on

Residents desire to know what is going on in their neighborhood. Residents want to know about:

- time-sensitive issues happening now in their neighborhood. For example: a lost child that needs to be found or a suspect on the run after a housebreaking.

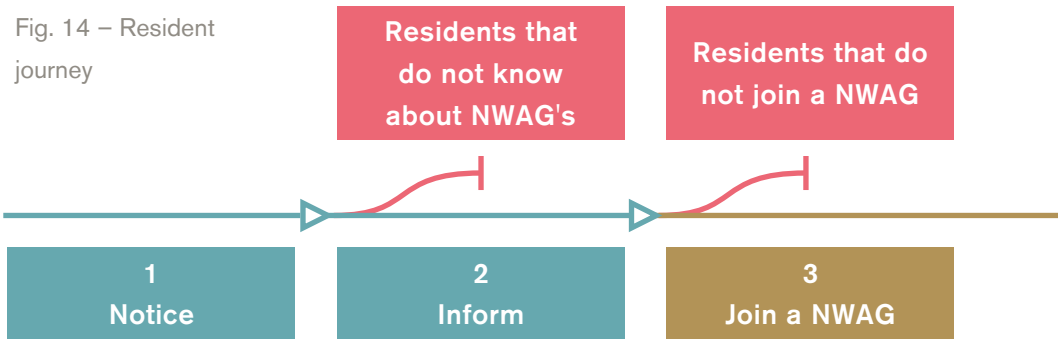
Fig. 13 – Desires that show why residents use NWAG's

- longer-term issues, because it helps residents to be alert on those issues. For example: nuisance because of kids that hang around or a wave of car thefts.
- what has happened the past weeks/months. It is interesting to know how the neighborhood is doing. For example: decrease/increase in accidents at a dangerous crossing.

Some of this information can be retrieved by good contact with neighbors, other information lies with the government. Residents are therefore keen to be in touch with both sources. NWAG's help residents to retrieve information from their neighbors and NWAG networks help to get it from the government.

Participant 7: ***"It is not because of curiosity, but then you know what is happening here and you become vigilant towards it."***

Fig. 14 – Resident journey



Do what you can to improve safety

Residents want to do what they can to improve safety. They realize they have to notify someone if something is out of the ordinary. Depending on what they encounter, residents want to notify their neighbors, the police, the municipality or a combination of those. Alerting neighbors can be done through the NWAG. Residents also get to know someone needs help through the NWAG, so when they can they will help them out.

Participant 5: *"I find it important to participate in every initiative that is started for the ward. That is the task for a resident to join activities that others make an effort for."*

Better together

Residents find that improving security cannot be done alone. They do not only need their neighbors, but also the police and the municipality. Calling the emergency center or the anonymous alert center is a big step for a lot of people. NWAG's bridge the gap between not alerting at all and calling the emergency center, because making alerts in the NWAG gives residents the possibility to reflect upon their suspicions by fetching their neighbors' opinions. The coordinator offers an additional way to reach the police/municipality if they are in touch with them. This is important for long-term issues, like suspicions about a marihuana cultivation.

Participant 5: *"You have to work together on safety and livability in the ward."*

Feedback

After notifying, residents want feedback on what has been done with their notification. Feedback is also desired in case the government asks citizens to help. This feedback is now often not given at all. Residents want to receive this feedback through the NWAG network. Feedback helps residents because then they know that their contribution was useful for the police or municipality and helped them to act upon the issue.

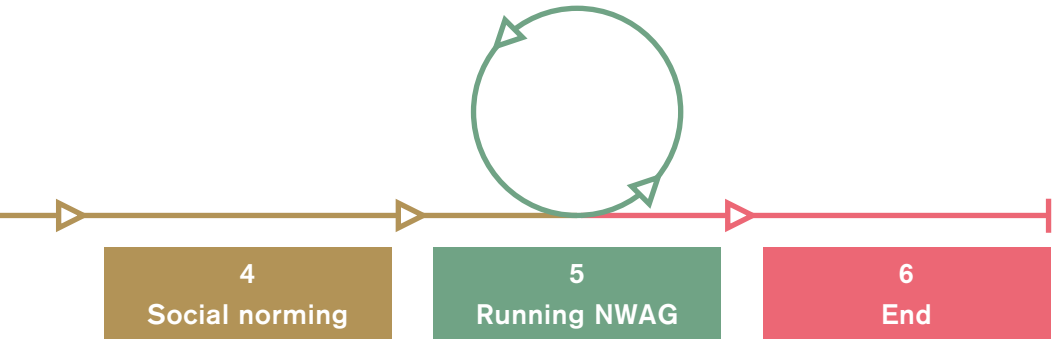
Use, experiences and issues of residents

How residents use and experience NWAG's, is explained on the basis of the developed resident journey (fig. 13).

[phase 1] Residents start to use NWAG's because they perceive issues with the safety in their neighborhood. It is extra apparent for they that they want to do something when they have been a victim or when there is a hot spot of crime in the neighborhood. The first step is thus to notice these issues at hand. Residents are not likely to start group when they do not perceive any issues.

Participant 3: *"Why did I join? That was clear: because of the burglaries of course."*

[phase 2] When they want to do something about the issues, residents look for solutions. Residents find NWAG's via news or advertising, or they have the idea to start a group themselves. They think it is something that could help their neighborhood. They want to be informed on the details of what a NWAG is and does



and how the police or municipality supports NWAG's, so that information has to be available and findable. It is also an issue if there is no group to join because residents then have to take an extra step by starting a group. If they do so, they become coordinators. This is further discussed in paragraph 3.2.2.

[phase 3] Those residents that find a NWAG in their neighborhood, join the NWAG. Some residents do not want to join, because they have objections against what the NWAG is doing. The resident has to get in touch with the coordinator, who adds him to the WhatsApp group. Some residents do not want to share their personal contact details with their neighbors, which results in them not becoming a member of the group.

[phase 4] After being added to the NWAG, the coordinator informs the members about the applicable rules. The residents have to figure out how to work with it and what is and is not allowed in the NWAG.

Participant 3: ***"People published all kinds of nonsense that the group is not meant for."***

To reduce chatter in the safety-focused NWAG, some neighborhoods make a socially-focused NWAG as well. In this NWAG they have the liberty to message about anything that is of importance to them.

Participant 8: ***"Outside the alarm App, a chat box was started on WhatsApp, because people have the desire to discuss other things."***

[phase 5] When they find the shared information relevant and the rules evident, group members are likely to stay in the NWAG. The NWAG now enters the running phase, which can continue forever. Members are receiving the alerts when something is up or send an alert themselves when they see something out of order. When the coordinator is sharing information from the ward WhatsApp group (WWAG, see paragraph 3.2.2), members receive this information.

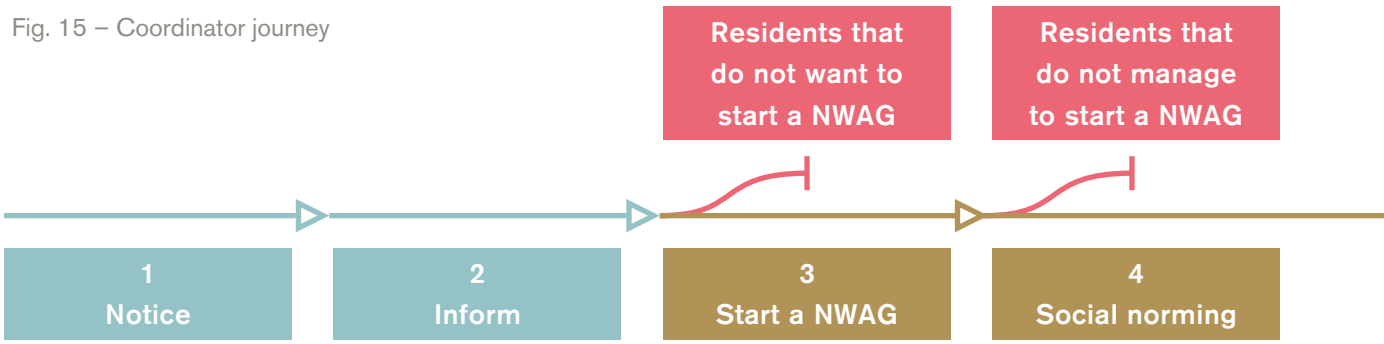
Participant 1: ***"It is not measurable, but I think it contributes to awareness and the way of observing and unconscious detection."***

[phase 6] The membership of the NWAG can end in several ways. If the resident does not adjust to the NWAG's rules, the coordinator can remove him from the group. Some residents find that there is too much chatter in the NWAG, so they leave the group.

Participant 2 (about a NWAG he once was a member of): ***"Those WhatsApp groups do not work, because you get completely crazy because of each others messages."***

The use of the NWAG can also end because the members of the NWAG do no longer report anything. Then members slowly stop using or forget to use the NWAG.

Fig. 15 – Coordinator journey



3.2.2 Coordinators

Why coordinators use NWAG's and NWAG networks

The reasons for using NWAG's are the same as for residents. There are additional insights into why residents become a coordinator.

Triggered to act

Coordinators feel triggered to start and maintain a group upon perceiving issues in their neighborhood or being a victim themselves. They feel they have to act to create a safe neighborhood. It seems that a considerable number of coordinators seems is interested in safety and security. They work for instance for the police or as a security guard. This could explain why they are triggered to act.

Play an active role in making neighborhood alert

Coordinators want to play an active role in the neighborhood. They want their neighbors to be more alert for the sake of their own, families, and neighbor's safety.

> Interviewer: *"Do you think it is important that people are alert?"*
> Participant 6: *"YES! I am alert by nature and some people call it inquisitive."*

Coordinators desire to receive information from the police and the municipality. They find it evident extra helps to make residents more alert. Coordinators also find it obvious the police and municipality want to make residents more alert. One and one is two, they think, so the municipality and the police should provide information to coordinators.

> Participant 1 about WWAG he does not have:
> *"But it is logically to think along with residents, I think it is a logical something. That that is not everywhere already..."*

Discuss in person about the neighborhood

Coordinators find that residents need the government to actually improve the safety. They desire that the government listens to the issues that are at hand in their neighborhood and collaborate in solving those issues. Coordinators want to discuss this in person with someone from the police and municipality. It gives them the feeling their initiative is appreciated.

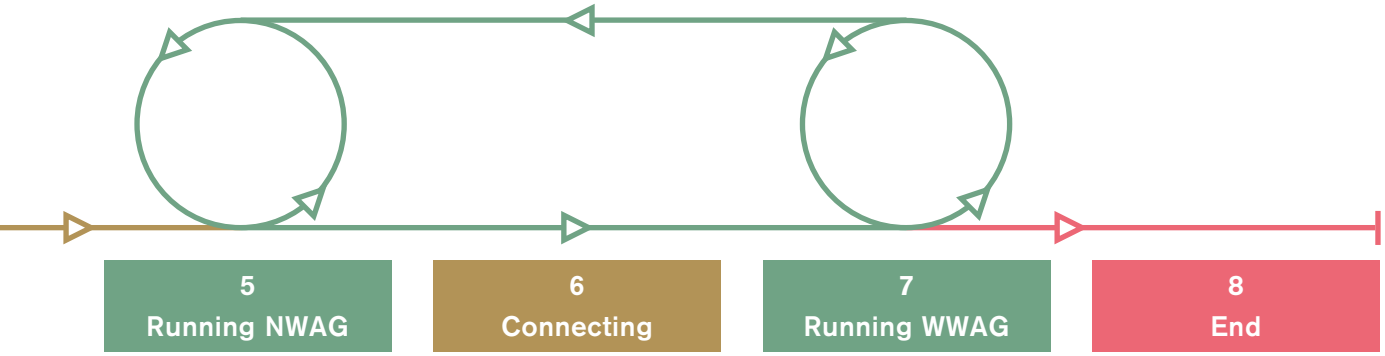
Learn more about neighborhood safety

Within a WWAG, coordinators want to learn about things related to neighborhood safety, for instance learning how to recognize suspicious behavior. They are interested in other initiatives, such as the Buurt Preventie Team (Neighborhood Prevention Team, see paragraph 2.5).

Use, experience and issues of coordinators

The first two phases of the coordinator journey are the same as for other residents. Upon deciding to start a NWAG, the journey of the coordinators differs from the resident journey.

[phase 3] Some residents that do not have a NWAG in their neighborhood take the initiative and start one. They become the coordinator. In starting a group, they immediately have four issues to solve.



Participant 4: ***"Yes, you start with enthusiasm to improve safety in the neighborhood, and then you notice a lot of things are involved that you did not think of in the beginning."***

1 The main issue is how to inform neighbors and get them to join the group. The coordinator has to enthuse the people, but also does not have infinite time to do so. It helps to have materials, such as informative letters for neighbors, to do this.
2 Coordinators find that they want to be supported, and they look if and how the police, municipality or other organizations are supporting NWAG's.

Participant 4 about the police involvement at the start: ***"Then I said: 'I have read something about WhatsApp', then he said: 'if you start a group, look there and there, and I have stickers to promote it'. He was entirely open for the initiative, so I find that very approvable."***

3 Coordinators thereby want their NWAG to be about safety, so they have the issue of how they are going to enforce order in the group and which rules they should set.
4 Coordinators find it important to verify that new members are living in the neighborhood, so they ask them to share their address. The coordinator has to manage the personal data of members, at least their phone number. Some coordinators want to know what privacy legislations are regarding NWAG's.

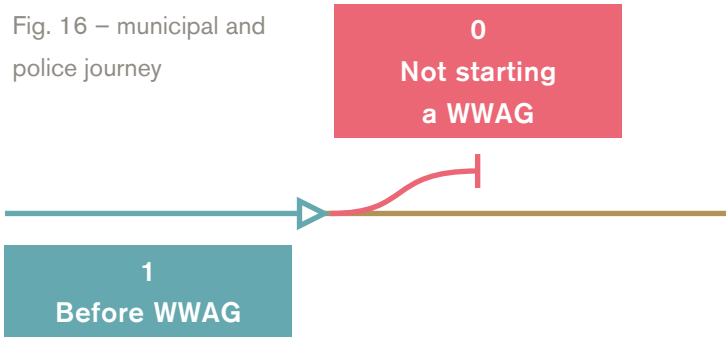
Coordinators are in this phase not interested anymore in using alternative apps. They think WhatsApp is the best solution for their neighborhood because it is fast, easy and free for anyone to use and there are others that use WhatsApp for neighborhood groups as well.

Interviewer: ***"did you consider other alternatives?"***
Participant 4: ***"No, well, everyone has WhatsApp. Even with a small phone, it works on any device. It is fast, easy and free. And I'm not the first one to use WhatsApp."***

[phase 4] The coordinator informs new participants about the rules in the NWAG. The new NWAG has to find some kind of social norm on what is acceptable. Coordinators argue that with tactful, matter-of-fact communication to enforce order the group norm is found. Coordinators find it acceptable that members leave or have to be removed from the group if they do not abide by the rules. It is frustrating for coordinators that social norming is apparently necessary, because the NWAG is not immediately functioning as well as coordinators want to. It helps them to be prepared, to have the rules they want to enforce ready.

Participant 6: ***"People have to get used to it, because sometimes people put things in the group that do not belong there. But that is a process, and over time gradually the right things happen on that network."***

Fig. 16 – municipal and police journey



[phase 5] Upon getting through the noisy phase, the NWAG enters a phase where it is running as the coordinator imagined. The number of tasks for the coordinator decrease: now and then a new member is added and sometimes the coordinator still has to enforce the rules. Coordinators tell they like doing it, as they are more aware of what is going on in the neighborhood. It seems that residents also start to see them as some kind of knowledge base or authority in the neighborhood, asking them all kinds of questions.

Participant 1: *"The disadvantage is that they think I know everything. I do know reasonably much. (examples of what people ask him) Or: 'can I build an addition on my rooftop terrace?' Then I say: does it say structural engineer on my forehead?"*

[phase 6] Coordinators are either contacted by police or the municipality to collaborate or they try to get in touch themselves with the police or the municipality. It is a real setback if the police or the municipality is reluctant to be in touch with the coordinator, because coordinators do not understand why the police and municipality would not want to collaborate. Coordinators find the advantages for the police and the municipality obvious: make people alert by informing them and receive information about the neighborhood from enthusiastic residents. Coordinators just want to help and be helped.

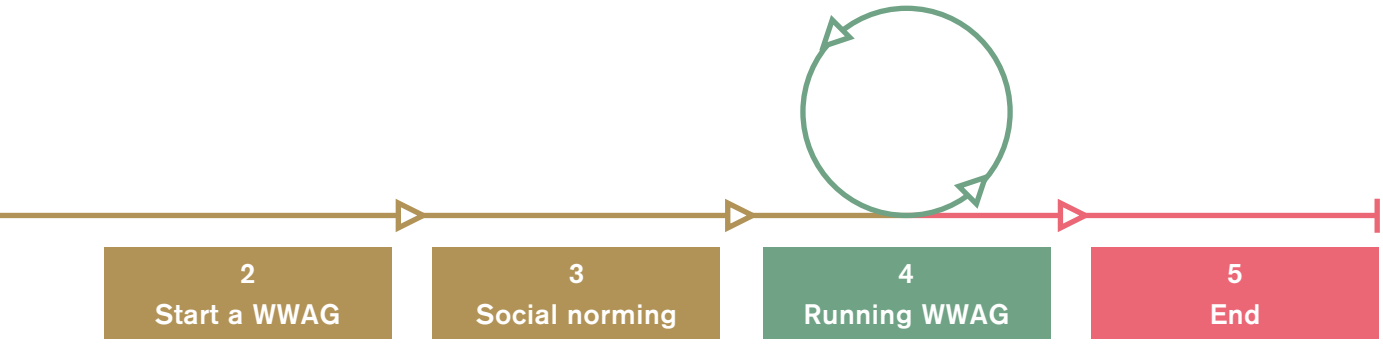
[phase 7] The coordinator is a member of a ward WhatsApp group (WWAG). Other coordinators in the ward, someone from the municipality and the police are a member of the WWAG as well. The municipality and the police share information with the coordinators, that can be forwarded to the NWAG's. It depends on the WWAG whether coordinators can share information to inform other NWAG's and/or the government.

Coordinators find it frustrating if they are not allowed to share information, because they find it would help in improving safety in the whole ward. They see it as an act of mistrust towards them when the police/ municipality does not allow them to do so.

Participant 4: *"And they have 12 coordinators they know [...], so those are good people, so then you can take them into confidence, that when they see something weird in their neighborhood to send a message."*

Coordinators find that the police and municipality take them seriously by letting them share information. Coordinators completely understand that they cannot pass on every little bit of information, because not everything is relevant for government and/or surrounding NWAG's. They also find the emergency center has to be called first in case of an imminent issue and find it logical that the police or the municipal officials connected to the WWAG are not 24/7 reachable to solve issues.

[phase 8] The coordinator journey can end, when the coordinator quits being a coordinator, or when the NWAG stops. The group can stop because the coordinator does not maintain the rules adequately. The NWAG can also stop when members forget the group and no longer share alerts. This can be prevented by the coordinator by stimulating members to alert the group in case of issues, or by providing extra information, for instance via a WWAG.



3.2.3 Police and municipality

The police and the municipality are convinced that contact with and participation of residents can help to create safe neighborhoods. They think they can use NWAG networks to inform citizens and to receive information about what is going on in their environment. Reasons are the success stories from other wards, although they find that the contributions of NWAG's to safety in the neighborhood are really hard to put in numbers.

Participant 8: *"People are far more aware and care more about their surroundings."*

Why the police use WWAG's

The police focus on criminal activities and breaches of the law. NWAG's mean direct participation of residents for the police: they can ask for the help of residents through NWAG's and the threshold for residents to get in touch with the police decreases. The communication with residents happens straightaway and is easier, more direct and personal. The role of the police in NWAG's thus is to send and receive information about current issues in the neighborhood. Ward policemen try to improve awareness of residents towards certain issues, so then the NWAG is mainly seen as a tool to communicate preventive measures.

Participant 8: *"I find it natural to do, it's a way to get in touch with people."*

Why the municipality uses WWAG's

The municipality takes a wider scope when looking at safe and secure neighborhoods, looking at public space and social structures as well as criminality and nuisance. The municipality finds NWAG's can intensify participation of residents in their neighborhood community. Residents communicate to each other what is going on in the neighborhood, strengthening social cohesion. Secondly, the information about issues can go mainly to the police or sometimes to the municipality, improving participation with governments.

Participant 9: *"In this way, we help to reach a higher citizen participation."*

Use, experience and issues of police and municipality

The reasons to make use of NWAG's are slightly different for police and municipality, but the use and experiences are the same. Therefore, one journey for both police and municipality was developed that describes the phases they go through.

Participant 9: *"But the advantage we have is that the head of the police and politics and certainly the mayor support it fully."*

[phase 1] The police and municipality perceive more and more citizens make use of NWAG's, both in and outside the area they survey. The police and municipality have to decide whether they are going to start supporting groups or not. It helps to have widespread support from both municipality and police.

[phase 0] The main obstacles to actually start supporting NWAG's, are the number of assumptions the municipality and police have about using an NWAG network. The most apparent assumptions that were collected in the interviews are presented in table 3.

[phase 2] Policemen or municipal officials start to get in touch with NWAG's via coordinators. They find that some of the above assumptions are not true in supporting groups and find a way to work around the rest. Almost always expectations are exceeded when it comes to these assumptions (table 3).

To get in contact with residents, to let them start NWAG's and to connect them to the network, an advertising campaign is used by participant 9 and 10. Participant 8 said that she mainly promoted the use of NWAG's during housebreaking aftercare she gives to residents. Both ways are successful in terms of the number of groups that are active.

[phase 3] When all coordinators are in a WhatsApp group together with police and/or municipal officials, some rules are set to keep it about safety. The officials enforce those rules to keep order, as coordinators do in their own NWAG's. At first, coordinators simply have to figure out what is the intention. Alike to the NWAG's these groups need a bit of time to find the right way of communicating with each other.

Participant 10: ***"If we would not have done it, we would not have solved those cases."***

[phase 4] The main task for police and municipality is to provide information and to receive information to/ from the network. They perceive that providing information helps to prevent incidents by making citizens more alert and to get help from residents on incidents happening right now.

Receiving messages from coordinators is mainly good to get a bond with them and what is going on in the ward. Occasionally the police or municipality has to add coordinators to the group and maintain order.

Police and municipality organize meetings with the coordinators to bond with them and to give education to coordinators about safety-related topics, for instance recognizing suspicious behavior.

The role municipalities play is often more facilitative, meaning they get in touch with the NWAG coordinators and put them in the right NWAG network group. The role of the police is more to provide the information for the ward and receive information from NWAG members to act upon. However, these roles are not mutually exclusive, and can both be done by police and/or municipality.

Participant 9: ***"Municipality and police cannot do without each other."***

Once the network is running, it turns out that coordinators can take over some organizational tasks from the police and the municipality. Experienced coordinators can help less experienced coordinators, and a core group of coordinators can also organize the meetings.

Participant 8: ***"And often I notice that residents that are doing it for a longer time, have already solved it for the coordinators that just started. So they educate each other."***

Participant 6: ***"In the meantime, the municipality is present and facilitating, but the meeting is chaired by one of the BIN coordinators."***

Table 3 – Assumptions done by police and municipality versus their experienced reality

Assumption	Reality
NWAG's are a resident initiative that should stay with residents, so the police/municipality should not meddle in how residents are doing things.	Being in touch with coordinators of groups does not mean you take away the initiative from them. Participant 10: *"It is an organic whole, so structured on the one side, static, we have one coordinator group per ward. And then all kinds of things happen that we cannot influence. But I like that, because it is a citizen initiative."*
The privacy of NWAG members cannot be guaranteed, because the police/municipality might know their names or see their phone numbers and can directly see what they send to their neighborhood.	By not being in the NWAG itself, but only being in touch with the coordinator through the WWAG, the police and municipality cannot see people's personal data. Participant 8: *"At some point I left that group, because I get that people do not want the police to monitor it. There has to be a professional distance. But I kept in touch with the coordinator, she became the link between residents and me."*
Residents send messages that are irrelevant for municipality/police if they can send direct messages. Participant 9: *"Otherwise they will tell us everything and we don't need to know when they have a birthday"*	Police and municipality mainly find that residents do rarely send them messages that are irrelevant to them. If they do, explaining why they cannot send that to them helps to prevent it in the future. Participant 8: *"And if I say it like that, it is very well accepted, because they understand. Everything you explain, they understand for sure."*
Residents will no longer call the alarm center if they can send WhatsApp messages.	The WWAG increases the supply of information about issues and gives explicit instructions to call the alarm center. Therefore, coordinators and residents are likely to call the alarm center more rather then less.
Continuity of NWAG's over longer time cannot be guaranteed, because there has to be someone that runs it in the neighborhood.	Through supporting coordinators, it becomes more attractive to be a coordinator. People that feel that the police or the municipality supports them, are more likely to engage.
NWAG's stimulate to send alerts about suspects that are based on nothing of the unknown and that create fear among residents.	It really helps to instruct coordinators to what are desired messages, because they will be able to manage their NWAG's better. Through support, NWAG's that share messages based on fear can be prevented.
The police/municipality cannot send information to NWAG's because the data is classified.	Participant 10: *"Everything we share on WhatsApp is not police information."* NWAG's give residents already open information in a way that is convenient and accessible for them. Without the NWAG, most residents most likely do not even receive this information.
The police/municipality have no time to support NWAG's, not to send messages to coordinators and not to organize meetings for them.	It is a time investment, mainly to start it. But once it is running, it saves time. Participant 8: *"Every group has 50 to 60 residents connected to it, so I have here in my phone direct access to about 2000 residents. Well, I cannot bike against that."*

3.3 Limitations

One limitation lied in the spread and representativeness of participants. The participants that are NWAG members are not representative for all members. The interviewed coordinators said that all kinds of people are member of their NWAG, but the interviewed members (participant 2, 3 and 5) were all male and between 55 and 70. Only participant 7 did not join a neighborhood group. To get more insight into why people do not join a group, more information from non-participants is necessary. These limitations can be explained by the restricted time for recruitment and because around ten participants were desired in combination with a lot of categories of participant groups.

The user research was done with current coordinators, that are all people that care about neighborhood safety a lot. Maybe other types of people would be interested in becoming a coordinator as well, but do not become a coordinator now. Those people should be mapped using another type of research.

3.4 Conclusion

In this chapter, the insights into the use and experience of NWAG's were presented. They were collected through interviews with users of DNC's.

Residents and coordinators desire to be supported by the government. It makes sense to give support to NWAG's via coordinators, as they can be a bridge between police/municipality and residents. However, the police and municipality tend to see a lot of problems with supporting NWAG's, which can result in not giving any support at all, as is the case in The Hague. The participants from Sint-Michielsgestel, Zoetermeer, Loosduinen, and Amstelveen showed that all assumptions about problems with giving support are either not present or resolvable in reality.

This project thus focuses on how the municipality of The Hague should support NWAG coordinators. The insights from the user research indicate several points about which support should be given, that are discussed underneath. This information is used in chapter 4 to develop a design brief and in chapter 5 to ideate.

Municipality and police together

Both municipality and police should be involved with supporting NWAG's. The main content on NWAG's is information that comes from or goes to the police, but occasionally the municipality can also play a role in resolving issues. The resources of the police are very limited, and the municipality can take a lot of organizational hassle away from them.

Information supply to residents

Residents want to have three types of information in order to become more alert: time-sensitive issues, how to guard against current longer-term issues and developments over the past weeks/months. This is in coherence with the desire of the police and municipality to make citizens more alert and let them help and notify the government if something is up. So, municipality and police should not be reluctant with giving this information. A lot can be done by sharing the information that is public already via the NWAG's, because in this way it comes to residents in a way that is accessible to them.

Giving feedback on alerts

The police or municipality should send out an alert on a time-sensitive issue because residents are more than willing to help resolve the issue. Important is to always come back to residents after the issue is not so imminent anymore about what happened with it. Otherwise, people will stay alert towards the issue.

Sharing information with police and municipality

Next to receiving information, residents find NWAG's fit for sharing certain information with the police and municipality. In a network of NWAG's the coordinator can be a service hatch from residents to police/ municipality and vice versa. It is important to train coordinators on what should be share and what not, so that the shared information shared is valuable.

NWAG to NWAG sharing

It works to have a WWAG with all coordinators from the NWAG's in a ward. In the WWAG coordinators should be allowed to share alerts with each other, in case they think it is important for multiple NWAG's to know about that information.

Help coordinators along their journey

The municipality and police should strive to catch those residents interested in starting a NWAG and immediately support them, as well as the hard-core coordinators that already have a group for years. They have to be connected to a network of NWAG's. Publicity should announce that any NWAG, non-existent to very old, can join the network.

Practical issues in the startup phase

Residents taking initiative to start a group have to deal with practical issues. The municipality and police should help these residents to lower the threshold to start a NWAG.

Marking the area of the group

At the moment, the municipality does not let citizens mark the area of the NWAG using a traffic sign. This annoys NWAG coordinators and members. The municipality should revise their policy on traffic signs, to make it possible to mark NWAG areas in the public space.

Chapter 4

Design brief

Chapter 3 presented insights into the use and experience of neighborhood WhatsApp groups (NWAG's). This chapter builds upon the insights to develop a goal for providing support to NWAG's. Also, a scope for designing the support and a vision on what the support should look like. The design brief is used as a starting point for the idea generation and idea evaluation in chapter 5.

4

◂ Fig. 17 – Analysis of the interviews done in the user research (own photo)

4.1 Design goal

Chapter 3 showed the desire of residents to have support from the police and municipality for their NWAG, but the police and municipality have assumptions about providing this support. These assumptions are either resolvable or not present in reality, so the municipality of The Hague should start to provide support to answer residents' desires. The research showed support is best given to coordinators of NWAG's and several points where this support should be given. The to-be-designed support should be evaluated with stakeholders, to make sure it is a validated design. Therefore, the design goal is:

Design support for coordinators of NWAG's focusing on safety, in order to fulfill coordinator's desires that followed from the user research. Test and iterate the design.

4.2 Scope

The to-be-designed support makes use of NWAG's as they are and does not change the design of WhatsApp in any way. It also makes use of a ward WhatsApp group (WWAG) with coordinators of NWAG's in a ward, a municipal official and a police official. The design is thus about fulfilling coordinator desires when it comes to receiving support for their initiative from the municipality.

The desired coordinator journey should be a unified experience from noticing NWAG's exists to being in a network with other coordinators, the police and the municipality. Therefore, the focus will not be on

- doing marketing to get residents to start NWAG's, but at picking up from their first small interest throughout the phases of use. This is also more interesting for the municipality, as they are interested in how to support NWAG's, rather than getting residents to start NWAG's.
- the exact rules to be set in the NWAG and the social processes around setting those rules, because coordinators indicated they set those rules themselves based on the basic rules that can already be found online.
- preventing the end of the NWAG or WWAG. The goal of supporting NWAG's is to set up a WWAG. Because of the support they get, being a coordinator should become easier and more attractive, so that the end of NWAG's is also far less likely.

This outlines the support has to pick up those residents that are interested in starting their own NWAG to support them to start and pick up coordinators that already have a running NWAG to connect them to the WWAG.

4.3 Interaction vision

The interaction vision gives shape to how coordinators should experience interactions with the support.

The first part is about giving coordinators the experience of having all aids at hand. The support should provide a structure like a workshop where all tools and materials are at hand, and you can just make things (fig. 17). The interaction can be described as **clear, simple and quick**.

Fig. 18 – The feeling of practical aids at hand

The second part of the interaction is about giving coordinators the experience they do necessary and valuable work. They are part of the team that works together to make the neighborhood a safer place. They personally feel trusted and appreciated for what they add, like a rugby team is working together to score goals and makes use of the fast guys to sprint and the heavy ones for the scrum (fig. 18). The interaction that is desired is **with attention, top-quality, informal and relaxed**.

Fig. 19 – The feeling of appreciation for their quality

4.4 Preliminary design guidelines

The design guidelines show in what way the support for NWAG's should be given. They are preliminary because through designing and evaluating the design (chapter 5) the guidelines can change.

Show appreciation to coordinators

With every piece of support that is offered, the question whether coordinators will feel supported through that action should come up. Key is to provide personal contact and offer the possibility to discuss what is going on in the neighborhood.

Provide clear rules and maintain them

Several of the assumptions of the police and municipality are not present or manageable when the WWAG has clear rules. These rules should be maintained by the organization of the network, which is the police and the municipality at first, but later can be (a part of) the coordinators.

Accommodate for all unique NWAG's

Every NWAG is different in rules and way of working. This freedom should also with support remain with the NWAG's themselves, because coordinators want to maintain self-determination in organizing their groups. The WWAG can thereby help coordinators to discuss the rules they set in their NWAG's.

Discuss how to improve the system with coordinators

Coordinators really want to increase the safety in the neighborhood and ward. They want the best system possible for the support they get from municipality and police. It is important to discuss with them about how to improve the WWAG and activities around the WWAG and give them a say in setting those up.

Make use of enthusiasm of coordinators

Some coordinators have a lot of enthusiasm to do things for their neighborhood. It would be a pity to not make use of it, so they should be encouraged to do more. They can be used for some organizational tasks, to promote NWAG's in areas that are not yet covered, or to also help out the neighborhood prevention team.

Use the knowledge of coordinators

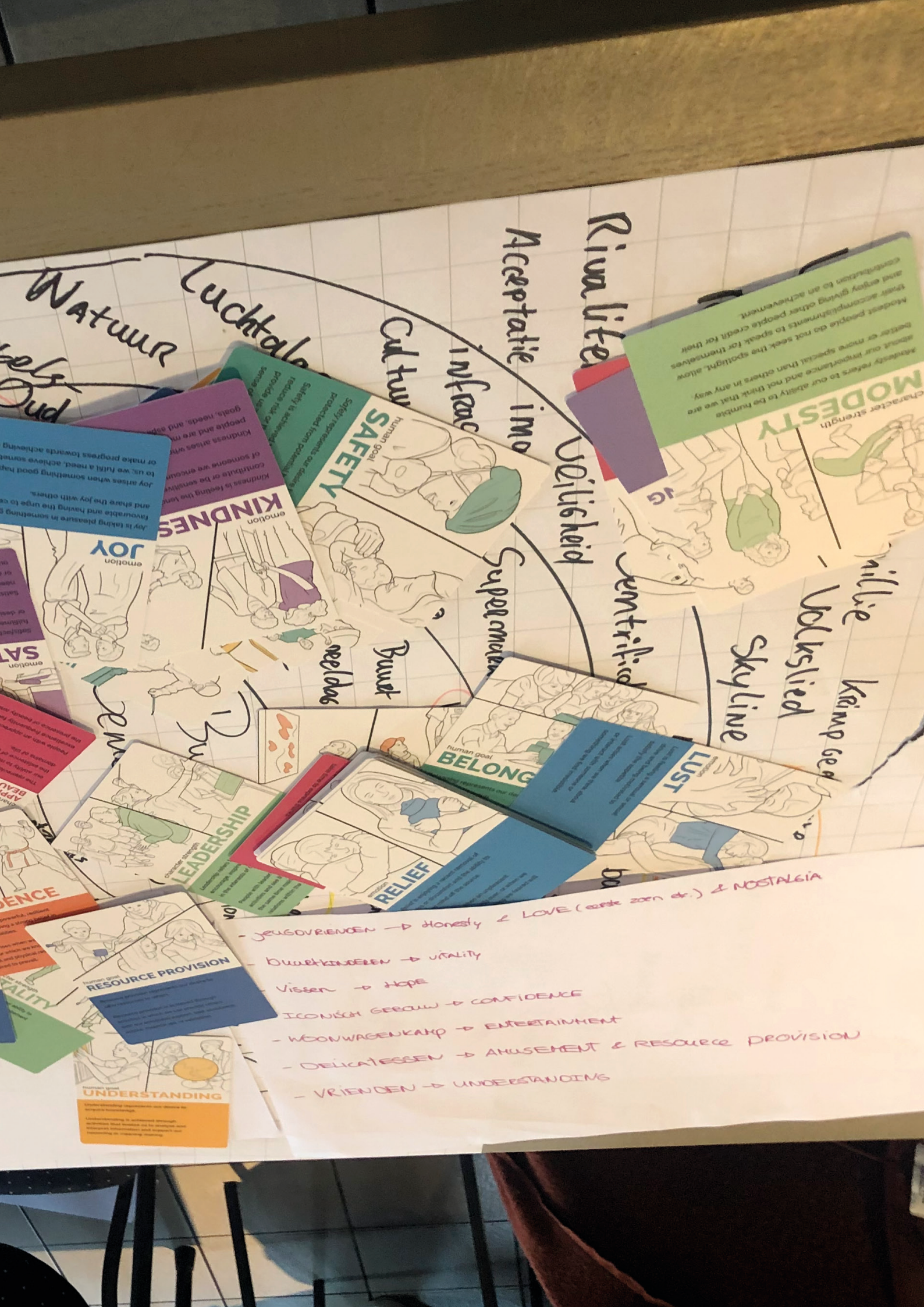
Because of their central role, the coordinator has a relation to both residents and professionals. Residents tend to tell these coordinators a lot. This can be interesting information for the municipality and police. The coordinators can also give an indication of how residents will perceive ideas to improve the neighborhood.

Expand the area of interest slowly

Residents often start with a fairly small area of interest. As they know more about that area and see more about what is happening around that area, they get interested in a bigger area. In designing it should be taken into account to gradually introduce residents to a bigger area.

4.5 Conclusion

This chapter showed the goal, scope and vision for the to-be-designed support for coordinators of NWAG's. Focus is on supporting residents that want to start NWAG's and assembling coordinators with running NWAG's into WWAG's. The design guidelines are the starting point for the ideation presented in chapter 5.


Watuur
Luchtal
Acceptatie
Rivalite
Veiligheid
Supermarkt
Buurt
Centrified
Skyline
Volkslied
Krimp ged
MODESTY
character strength
SAFETY
human goal
KINDNESS
emotion
JOY
LEADERSHIP
RELIEF
BELONG
LUST
RESOURCE PROVISION
UNDERSTANDING
- JEUGDVRIENDEN → Honesty & LOVE (eerste zoen etc.) & NOSTALGIA
- BUURTKINDEREN → VITALITY
- Vissen → HOPE
- ICONISCH GEBOUW → CONFIDENCE
- WOONWAGENKAMP → ENTERTAINMENT
- DELICATESSEN → AMUSEMENT & RESOURCE PROVISION
- VRIENDEN → UNDERSTANDING

Chapter 5

Design development and evalution

Chapter 4 assigned the goal of designing support to coordinators of neighborhood WhatsApp groups (NWAG's), so that the desires of coordinators can be fulfilled to this project. In this chapter the ideation and design proposal are explained, as well as the evaluation of the design proposal by six coordinators and by the client. The evaluation leads to a revision of the design guidelines (chapter 6) and is the basis for the final design (chapter 7).

5

◂ Fig. 20 – Development of ideas based on Design for Happiness Deck during session with design students (own photo)

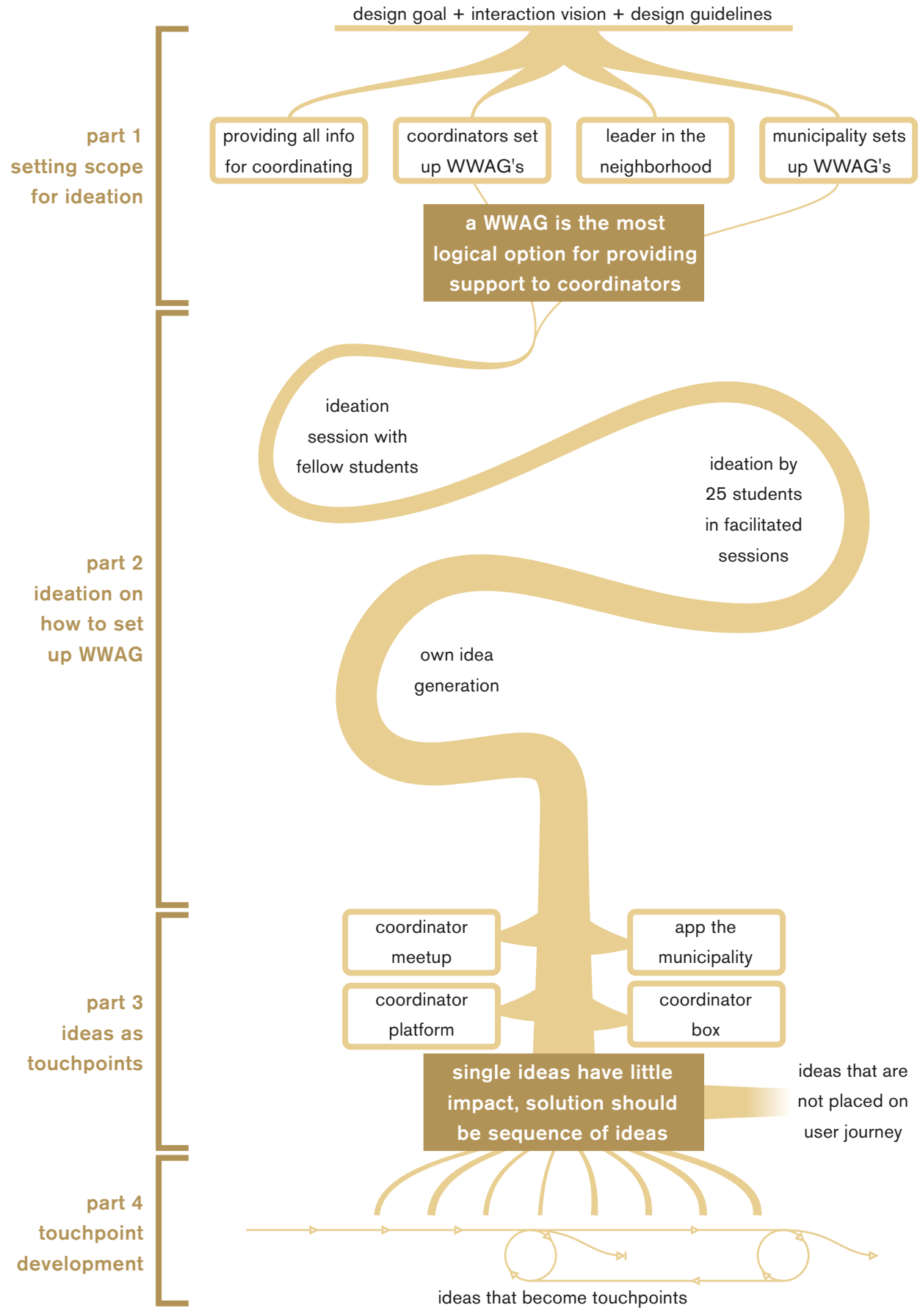


Fig. 21 – Overview of ideation

5.1 Ideation

This paragraph discusses how the final design was reached. The ideation was set up in four parts (figure 20). This paragraph presents the conclusions for each of the four phases. Appendix K shows the full explanation of the steps and ideation directions per part.

5.1.1 Part 1: setting scope for ideation

To set a scope for the remainder of the ideation, the goal was to find out a principle on how support is provided to coordinators. Four directions were developed and evaluated. WWAG's can help in letting citizens participate more, so that power shifts from municipality to citizens. From that viewpoint, it is interesting to find out if a design can help coordinators in a ward to collaborate and start a WWAG themselves. Then municipality and police possibly have to invest less to get the WWAG working and can connect themselves later.

5.1.2 Part 2: ideation on how to set up WWAG

In a session with fellow students, several directions were found on how coordinators can set up their own network. 25 students that participated explored further into a coordinator network (fig. 21). Appendix K.2.1 shows the design brief for that exploration.

Throughout the ideation, it turned out that it is very difficult to get coordinators to start their own network. When it comes to safety in the neighborhood, it is essential to involve municipality and police from the start, because their view is on a bigger area. Coordinators only start with the area of their own NWAG and the areas directly around that. It is hard to get all coordinators together on a scale that is valuable for the government. Also, the connection to the municipality and police is missing, but essential for coordinators. Nevertheless, the ideation provided many interesting ideas on how to support NWAG's, that were further developed by the designer performing this project.

Fig. 22 – Ideation session by design students in creative facilitation course

5.1.3 Part 3: ideas as touchpoints

The huge amount of ideas from part 2 were clustered and through clusters fit into four concepts. None of these concepts give a complete image on how coordinators should be supported by the municipality. They only fulfill particular desires and use phases of coordinators. However, all desires and use phases can be covered, when the concepts are merged and completed with ideas generated in part 2. By doing this, the individual ideas became a sequence that forms a service providing support for coordinators (fig. 22). The ideas are then touchpoints, which is a term used to refer to a means that creates an interaction between a user and a service.

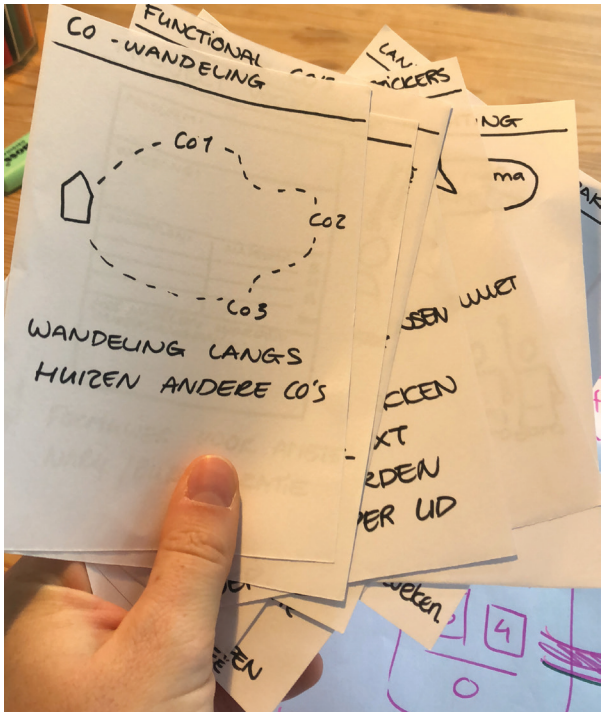


Fig. 23 – First touchpoint designs

5.1.4 Part 4: touchpoint development

The touchpoints can be placed on the earlier generated coordinator journey (paragraph 3.2.2), to check whether all phases are supported, and all desires are answered. The scope in the design brief (chapter 4) was set to making a unified experience from noticing NWAG's to being in a WWAG with other coordinators. This means the focus is on phase 3 starting to phase 7 running WWAG on the user journey. Mainly the phases 6 connecting and 7 running WWAG are of importance, since the goal is to stimulate coordinators to connect to the WWAG. Ideas were selected as touchpoints based on whether they fulfill the desires and guidelines. Gaps were filled with new ideas for touchpoints. Some touchpoints are applicable in one phase, only answering one desire, where other touchpoints are applicable in multiple phases answering multiple desires.

5.2 Design proposal

5.2.1 Coordinator journey for municipality

Figure 24 (next page) shows the journey phases for coordinators-to-be and coordinators to connect them to a WWAG. A resident that has not started a NWAG yet, needs first to notice the NWAG as a solution and then get information about what starting and coordinating a NWAG means. Starting a NWAG should be easy, so the means to involve neighbors should be available for the coordinator. Upon having started the NWAG, the coordinator should get help in communicating the rules of the NWAG and maintaining them. When the NWAG is running, coordinators should get help in placing street signs and making the group visible in the neighborhood. The coordinator should be *"pulled"* into the connecting to the municipality so that he can be placed in the WWAG. This should be easy for the coordinator and he should be received enthusiastically by the municipality. Upon being a member of the WWAG, the coordinator exchanges information between his neighborhood and the entire ward. He should also be invited for accompanying activities. It is undesirable coordinators leave the WWAG or that their NWAG ceases to exist. Therefore, it should be supported to acquire an extra coordinator per NWAG, that can take over tasks if the first coordinator cannot do it (anymore). If residents already ended up there before implementing the support service, the frustration of these people should be taken into account as they enter a new journey.

5.2.2 Touchpoints

A total of 78 touchpoints have been generated. They are spread across the phases in the coordinator journey and the following six categories: interaction with a certain person, interaction at an event, a digital interaction, an interaction via WhatsApp, interaction with a physical thing and other interactions. The touchpoints are sometimes more conceptual and sometimes very directly applicable. The next spread depicts four examples of touchpoints. Every touchpoint was placed on a card with a number and title, a description and a descriptive figure (fig. 23, appendix L shows all touchpoints).

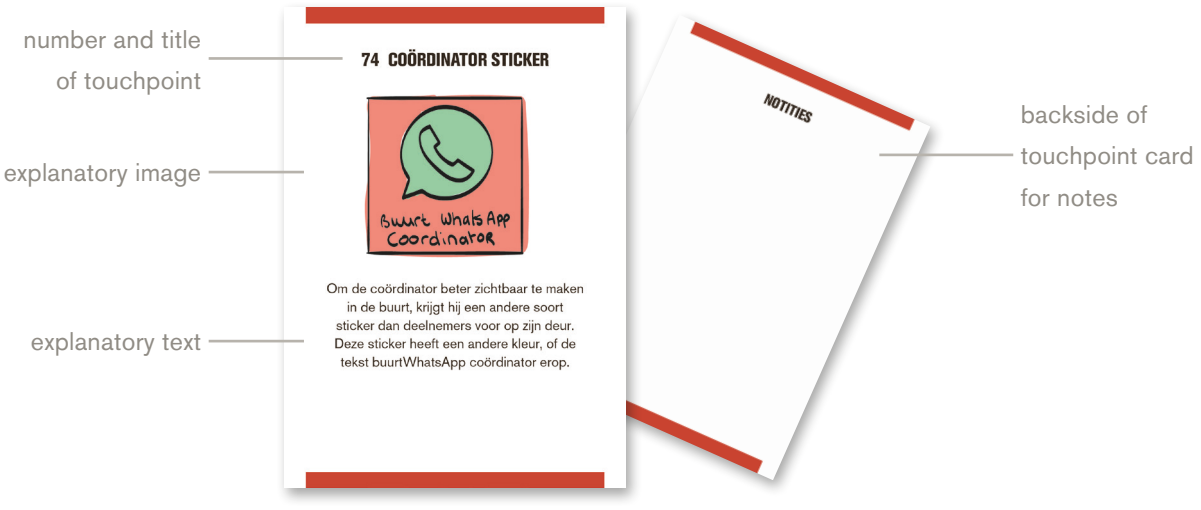
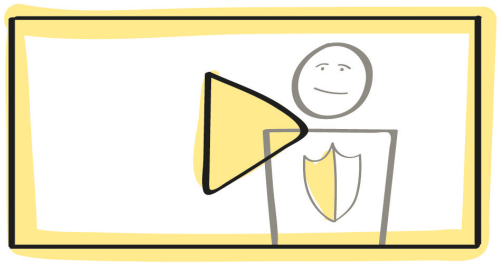


Fig. 24 – Touchpoint cards

Fig. 25 – Coordinator journey and examples of touchpoints

		Residents that do not know about NWAG's	Residents that do not want to start a NWAG	Residents that do not manage to start a NWAG
journey steps	1 Notice	2 Inform	3 Start a NWAG	4 Social norming
goal of resident	The resident sees that it is possible to improve safety in the neighborhood with using a NWAG.	The resident aims to find out what starting and coordinating a NWAG means, to decide whether to start a NWAG.	The coordinator enthuses neighbors to join the NWAG by making it public that he is starting a NWAG.	The coordinator communicates rules to members and upholds these rules in the NWAG.
support aim	Visibility of NWAG	Information about NWAG and coordinating a NWAG	Publicity of new NWAG in neighborhood	Helping to uphold rules

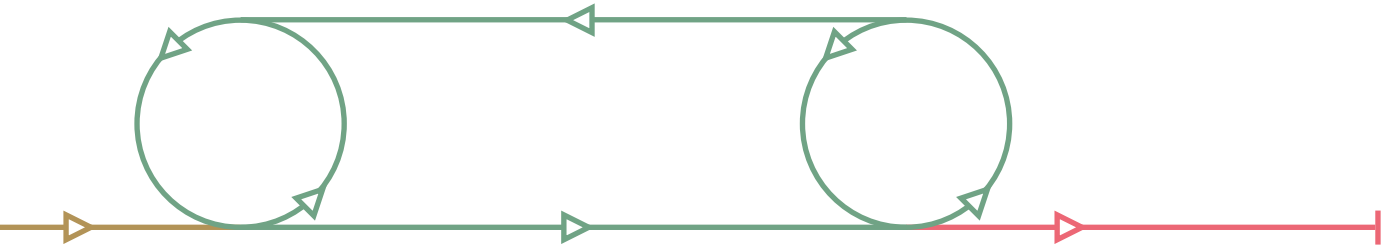


Example 1: Safety vlog

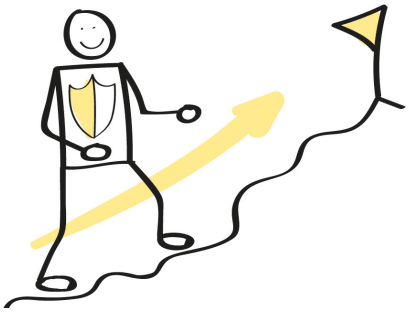
On Youtube the municipality offers a safety vlog. Neighborhood WhatsApp is one of the topics that are addressed. Coordinators get interviewed, and information is given about what a NWAG is and does. Municipal and police officials that work with NWAG's are also interviewed.

Example 2: Coordinator sticker

To increase visibility of the coordinator in the neighborhood, he places another sticker on his door than participants of the NWAG. This sticker has another color and shows NWAG coordinator in text.

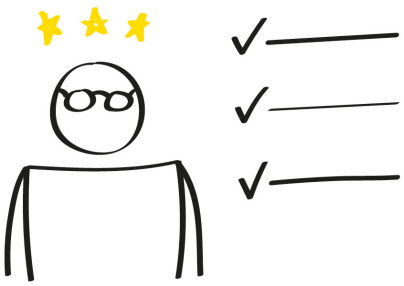


	5 Running NWAG	6 Connecting	7 Running WWAG	8 End
journey steps				
goal of resident	The coordinator has a running NWAG. Occassionally he adds a new member and upholds the rules. Also, he wants street signs to show the existence of the NWAG.	The coordinator wants to connect to the police and the municipality to exchange information about the neighborhood.	The coordinator is member of a WWAG and forwards information between WWAG and NWAG if necessary.	The coordinator leaves the NWAG/WWAG. He is frustrated that his initiative did not work out.
support aim	Clarity and help on how street signs are placed	Adding coordinator to WWAG	Inviting coordinator for accompanying activities	See to prevent this step; otherwise deal with frustration first



Example 3: Coordinator challenges

Coordinators challenge each other to make the NWAG's better. An example of a challenge is finding a second coordinator for the NWAG, that manages the NWAG if the first coordinator is not present. With completing the challenges, the coordinators collect points, that determine a bonus they get.



Example 4: Safety expert

A safety expert provides specific information for NWAG coordinators about improving safety in their neighborhood. For instance, recognizing suspicious behavior, domestic violence or preventing housebreakings.

5.3 Evaluation of design proposal by coordinators

5.3.1 Method

Goal and research questions

The evaluation had two equally important goals:

- Evaluate the proposed use phases and activities, concerns, questions, pains and gains per phase with coordinators.
- Evaluate touchpoints with coordinators.

The research questions asked belonging with these goals are:

1. What do coordinators think about the proposed user journey?
2. Are the described activities, concerns, questions, pains and gains accurate?
3. What are concerns for coordinators in assessing touchpoints?
4. Which touchpoints do they prefer?

Participants

The requirements for screening participants was that they are a NWAG coordinator and to have a spread in the support they currently receive. All participants are shown in table 4.

Research setup

To answer the research questions, an interview of 60 to 90 minutes is held with the participants (fig. 25). Not every participant could evaluate 78 touchpoints in the given time. Therefore, a selection of touchpoints was used based on whether the touchpoint represented an interesting or new concept. Appendix M shows which touchpoints were selected. The 69 touchpoints that were chosen to test were divided over participants, because this was still too many to evaluate in the given time. Every participant evaluated around 25 touchpoints that were selected on belonging to a certain phase of the coordinator journey (appendix N) and a spread over the categories introduced in paragraph 5.2.2, with the aim to evaluate every touchpoint at least twice. Secondly, touchpoints were selected on their working principle, so that at least one with the same working principle was evaluated by each participant. Appendix N shows what touchpoints were evaluated by what participant.

The researcher used an interview guide for the interview to ensure all topics were treated and to be consistent over interviews (appendix O). The interview had three main parts:

1. The researcher guided the participant through all phases of the user journey on the poster (appendix P shows full poster). Every phase was discussed with and evaluated by the participant.
2. Touchpoints were evaluated, by giving the cards with touchpoints to the participants and asking to evaluate them aloud and share their thoughts on every touchpoint. Then they had to place the touchpoint in a phase of the user journey on the poster. They were asked to put the touchpoints they found positive on the top, the medium ones in the middle and the negative ones on the bottom

Part.	Gender	Age	Occupation	Description
1	Male	40-50	Working	Coordinator of multiple prevention NWAG's in ward in The Hague. Is in touch with police and Buurt Preventie Team (neighborhood prevention team).
2	Male	60-70	Pensioned	Coordinator of NWAG in his own neighborhood in The Hague. Is in touch with ward police and municipality through the Buurt Preventie Team.
3	Male	50-60	Working	Coordinator of NWAG in his own neighborhood in The Hague. Is in touch with ward police through the Buurt Preventie Team.
4	Male	60-70	Pensioned	Coordinator of NWAG in his own neighborhood in The Hague. Is in touch with the ward police and municipality through Buurt Preventie Team.
5	Male	30-40	Working	Coordinator of NWAG in municipality of Sint-Michielsgestel. Is in a network with ward police and municipality.
6	Male	40-50	Working	Coordinator of NWAG in municipality of The Hague.

Table 4 – Participants of evaluation by coordinators

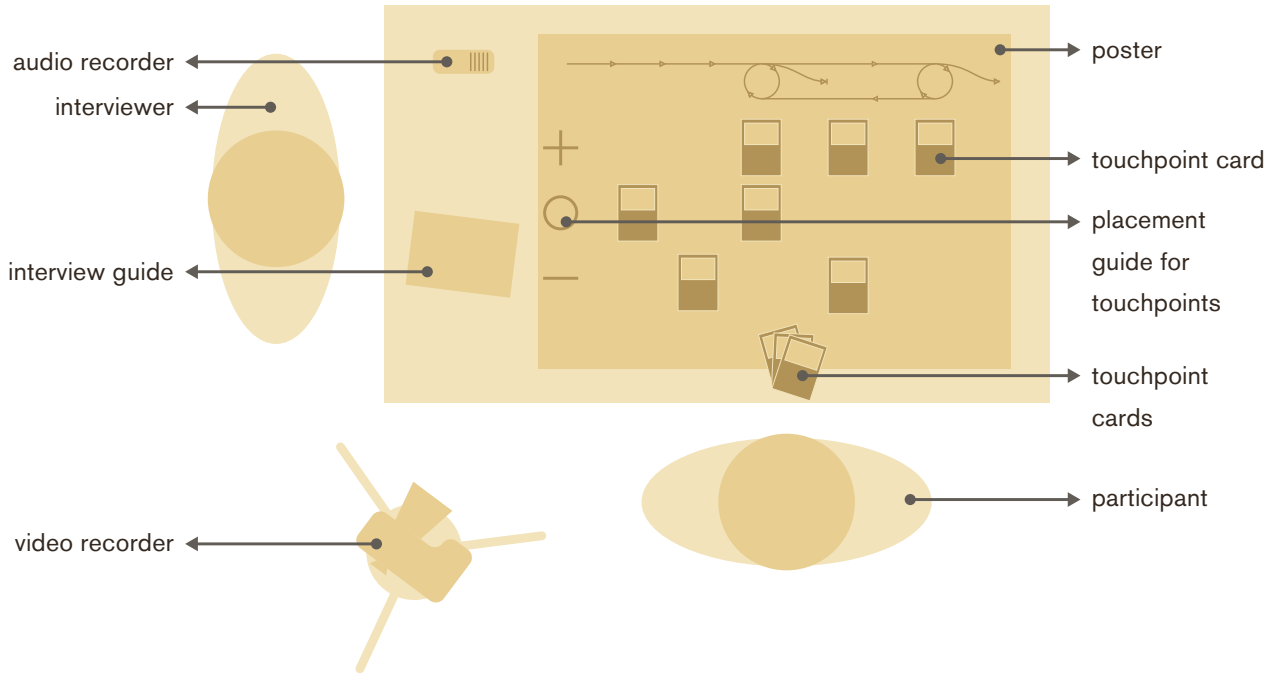


Fig. 26 – Interview setup

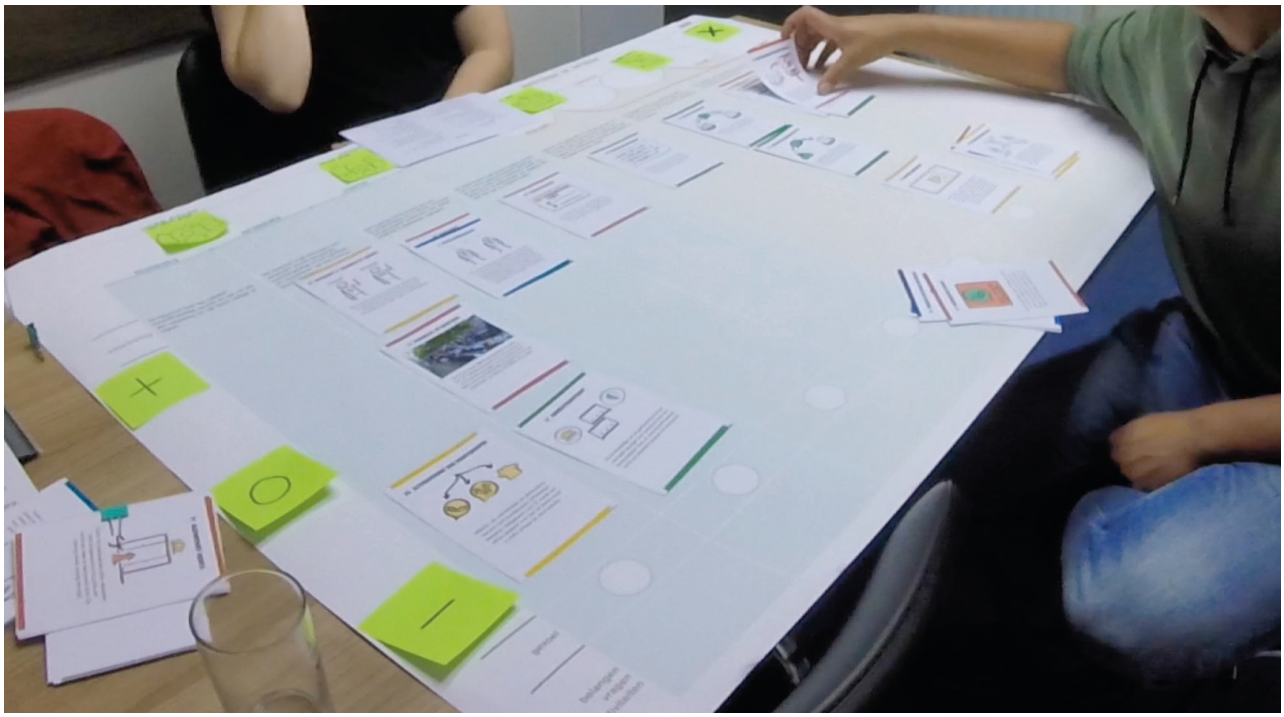


Fig. 27 – Poster with coordinator journey and touchpoint cards placed on it

(fig. 25). In between the researcher asked questions to deepen and verify knowledge.

3 The coordinators were given cards with emojis. They were placed on a bar on the poster with emotions, with the question *"could you describe how every phase feels for you as a coordinator with an emoji?"* The chosen emojis were discussed and every use phase was evaluated.

Retrieved data and data analysis

All interviews are recorded on video and audio. The video was shot over the shoulder of the participant facing the user journey poster, so that looking back at the placing of the touchpoint cards and emojis was possible in analyzing.

The interviews were analyzed in three steps. First, a video was made using only those useful shots, by cutting away the raw material where no insights could be retrieved from. Then this shorter video was analyzed and the interpretations from the raw material were written down in a sheet (appendix Q). The interpretations from individual interviews were used to create clusters that stretch over all interviews (appendix R).

Additionally, the ratings of participants for the individual touchpoints (good, medium, bad) were inserted in a sheet. Touchpoints then got a 5-step rating (++, +, o, -, --) based on how multiple participants rated them. Appendix S shows the rating of touchpoints.

5.3.2 Insights

The insights gained through the evaluation covered four main areas that are discussed underneath. There were some general remarks that add to or clarify the earlier user research. The negative and positive experiences with touchpoints are listed. Lastly, some improvements to the user journey are made based on the evaluation.

General remarks

Participants want support that is *"straightforward, outright"* (participant 5). It has to be evident why a touchpoint should be used, and the touchpoint should be easy to use.

Participants indicated that they find being a coordinator a responsible job. They find people should become a coordinator, because they are intrinsically motivated to make the neighborhood a safe place. Coordinators experience appreciation if their job is taken seriously by the government. The government should do this by collaborating and having face-to-face as well as digital contact.

> Participant 4: ***"the government should give some to citizens if they want society to look out for each other more."***

Participants stressed the importance of collaboration. Participants found you have to work together to improve safety. A distant and reserved attitude of the police or municipality is therefore not appreciated, as they are key players when it comes to neighborhood safety. The advantages of a WWAG are evident to coordinators.

> Participant 5: ***"They (police and municipality) are the only ones that can actually do something about it."***

Participants indicated that the WWAG should be initiated by the government. Coordinators are then far more likely to join since the whole initiative will be taken seriously because the government *"puts that weight in the scale"* (participant 4). Multiple participants mentioned that there should be a leader in the WWAG. Government officials have the natural authority to be that leader.

Some participants mentioned they desire that the government has a universal approach for dealing with NWAG's on city or city district level. Coordinators are also wondering what laws and rules concerning NWAG's they have to follow.

"the topic of neighborhood security is more serious than a game"

— participant 3

Negatively experienced touchpoints

Some touchpoint designs deliberately tried to broaden the usages of NWAG's to other topics than safety. For instance, touchpoint 52: a yearly questionnaire about what is going on in the neighborhood, of which a link is sent through the NWAG's. (touchpoints 6, 18, 24, 25, 37, 38, 36, 28, 58, 57, 77, 78.) Deviation from the topic of neighborhood security is not appreciated and not accepted without questioning.

Touchpoints with a more playful approach were not appreciated (like touchpoint 24, 37, 38, 64), because *"the topic of neighborhood security is more serious than a game"* (participant 3). Coordinators did not like to connect participation as a coordinator to competitions.

Coordinators dislike 'useless' presents like a Christmas box every year, as a reward for coordinating a NWAG (touchpoint 37, 38). Coordinators desire personal attention of the municipality and police, and find reward in that.

Participant 2: ***"You have all these people at Public Order and Safety somewhere in the rear. [...] And the only thing you get is some dog food and leaflets for the dark days offensive. And [name*] is the one to take the BPT by the hand and to say: we are going to do this together [...]. And then I think: well, this is obviously how we all progress a lot."***

Touchpoints that tried to make the participation of the coordinator in a network an official thing (touchpoints 70, 75, 76), were disliked too. Coordinators want things to be informal and easy. That is also why they find 'rules' too strict and unilateral as a term, they prefer talking about agreements.

Coordinators did not like touchpoints that showed who they are and where they live (touchpoints 73, 74). They feel they are just a resident of the neighborhood and a participant rather than a boss of the NWAG. They also find that with showing who they are and where they live, they invite criminals or angry residents to commit crimes against them.

Lastly, there are some touchpoints that were meant for getting in touch with the municipality via WhatsApp to sign up to receive support or to retrieve information about the safety situation (touchpoint 41, 42). Remarkably, participants found it unlikely that the municipality will deliver a good service via WhatsApp. They think the municipality cannot organize the backend of this.

* person at PO&S that supports people that want to start a Buurt Preventie Team (BPT) or a NWAG.

Positively experienced touchpoints

In collaborating with other coordinators, the police and the municipality, coordinators find face-to-face contact is essential. Touchpoints where there was a possibility to meet the people behind it, therefore got a high rating (touchpoint 1, 2, 3, 8, 16, 17). These exist always next to digital contact, at least via the WWAG. In the running network, coordinators desire to get together with the government and discuss current issues if that is necessary. Because of this, they appreciate having occasional meetings with everyone in the network.

> Participant 3: ***"It is then not even about the WhatsApp group, but about the interaction with each other."***

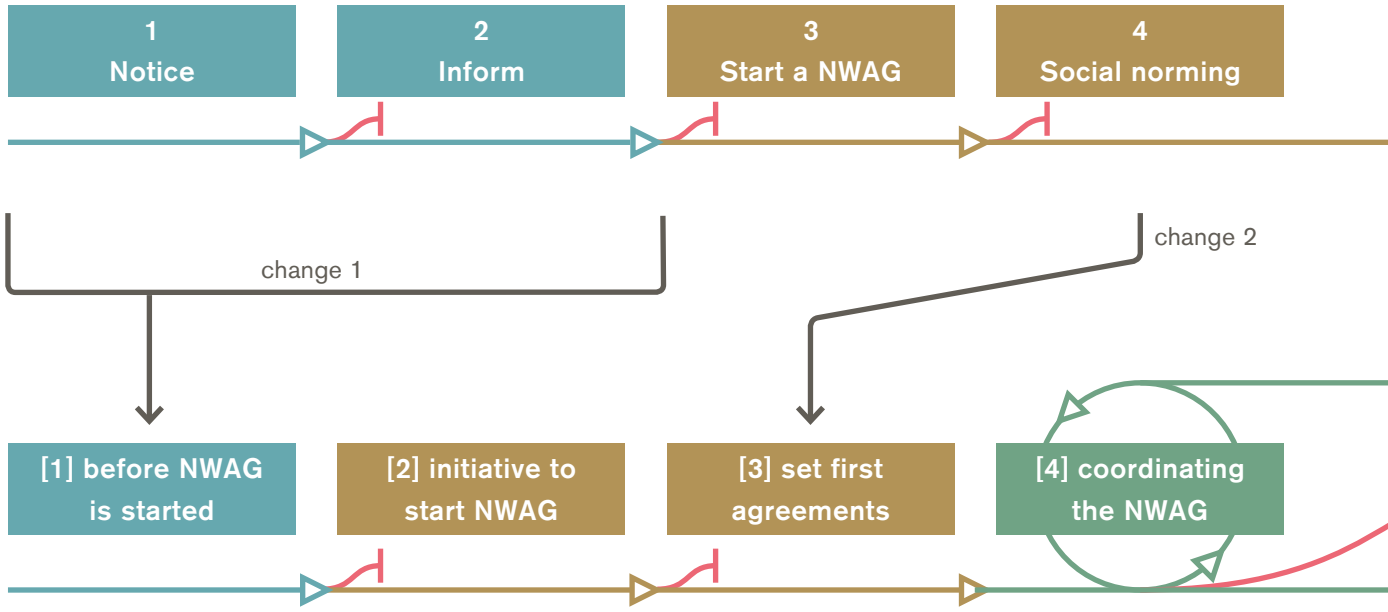
Participants appreciate help from police or municipality to get neighbors enthusiastic and create a willingness to join the group (touchpoint 2, 3, 19, 53, 55, 54, 56, 61). They find that when such an organization is behind it, neighbors are far more likely to join, as they think it is not some random unsupported initiative. Next to that, coordinators experience involvement from the police and municipality as 'backup' for starting their NWAG.

Additionally, participants like to receive practical support mainly in the starting phase, so touchpoints that provided that were rated highly (touchpoints 60, 62, 63, 67, 69, 68). This lowers the threshold to start a group. It is a powerful combination with perceived backup from a WWAG.

Once a NWAG is started and running, the group should be visible for the outer world according to participants. They think that discourages criminals (touchpoint 60, 69, 68). This explains why street signs are so desired. Participants appreciate it when the municipality places them for free.

There are some touchpoints for signing up with the municipality in order to receive support (touchpoint 41, 42, 33, 32, 21). Participants preferred to do this on a website or form from the municipality. Some participants already signed up their NWAG's at wabp.nl or alerteburen.nl and stressed that they find it a hassle to sign up again with the municipality to receive support.

Fig. 28 – Coordinator journey: old (top) and refined (bottom)



Refined phases of the coordinator journey

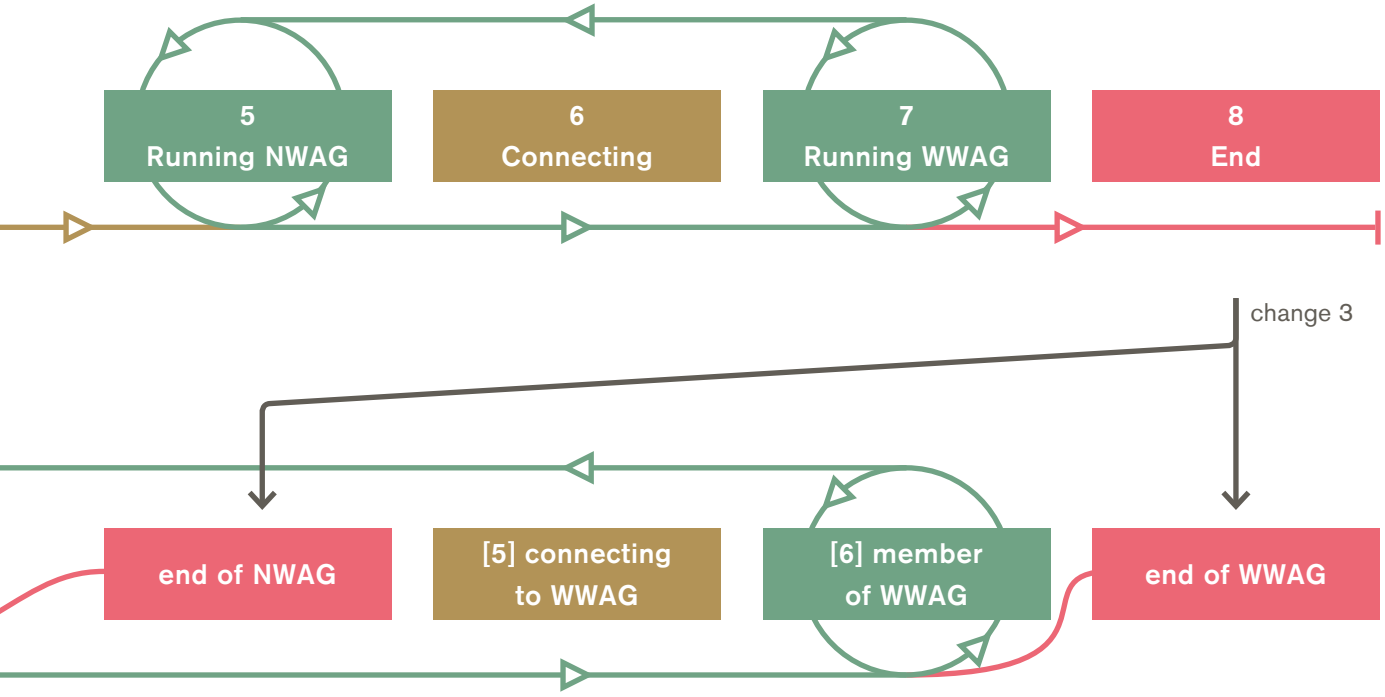
Participants indicated that the distinction between phase 1 noticing and phase 2 informing is unclear or nonexistent. This led to merging the starting phases into one phase, called before starting the NWAG (fig. 27, change 1).

Phase 4 was called social norming, where all group members find out rules together. However, participants indicated that they simply set the basic rules themselves and they said they find rules too strict and prefer to use agreements. The agreements they set at the start are very basic and do not provide guidelines for many particular situations, for instance allowing members to alert a lost pet in the NWAG. Coordinators discuss these situations with members. The fact that the coordinator sets the first set of agreements should be expressed in naming this phase, so it is called set first agreements (fig. 27, change 2).

Through analyzing the interviews, it also surfaced that the end phase of the NWAG and the end phase of the network of NWAG's have different causes and should be different phases in the journey. Thereby the network is optional and can already exist from the beginning, earlier then the NWAG itself exists. This should be clearer in the coordinator journey (fig. 27, change 3).

It is deliberate that these ends do not have numbers anymore. Although it is a realistic scenario, research has proven that the ending of the NWAG or the WWAG is unlikely when it is supported by the municipality and police. Because the focus of the design is not explicitly on preventing the end phases, but more on giving good support so that as a side effect end phases are not reached, these phases are less considered for the final design. This is also why the drop out routes in the first phases are not explained anymore in the final journey. The lines of the drop out routes and end phases will still be visible, because it is important to be aware of them.

Furthermore, several minor improvements to the naming of phases were done, which is also visible in figure 27.



5.3.3 Limitations

All participants have a running and working NWAG. Residents that would like to start a NWAG should be interviewed to get better insight into the first three phases of the coordinator journey.

All participants have contact with other coordinators, police and/or municipality. To get better insight in the coordinators that have a running NWAG, but no connection, these should be interviewed as well.

Just as in the user research in chapter 3, this research only included current coordinators of NWAG's. If there are other groups of people that are interested in coordinating a NWAG, the outcomes of this research cannot be used to set up support for these groups.

Because there were so many touchpoints, most touchpoints were only evaluated two or three times. However, the selection of touchpoints was done so that at least one of the touchpoints with the same working principle was selected, so that most working principles were evaluated in each interview. So, the evaluation gives insight into the working principles of touchpoints, rather than the touchpoints itself.

5.4 Evaluation by client

5.4.1 Method

After evaluating the touchpoint designs with the coordinators, an evaluation was done with the client. The aim was to gain insights into the concerns of the client regarding implementing touchpoints and to get an assessment of the investment for the municipality to realize touchpoints. 'Investment' was hereby defined in time, money, effort or a combination of those. All touchpoints evaluated on a five-step scale (--, -, o, +, ++) by coordinators got an estimation for effort. In an open-ended interview, the researcher discussed the touchpoints with the client. The results for the assessment per touchpoint can be found in appendix S.

5.4.2 Insights

Touchpoint assessment on investment

In itself, most touchpoints are not much investment to realize. But adding them up can lead to a considerable investment that needs to be done to realize it. It is therefore important to consider the necessity for each touchpoint.

Some touchpoints give support, but do not focus on the long-term support of NWAG's. In considering the necessity for each touchpoint, long-term support should be a factor.

Sometimes the cost for touchpoints is in convincing police and municipal officials that it is a good idea to start doing something, rather than actually implementing it. For instance, coordinators want to share messages with their WWAG. Officials then have to be convinced that if they set the condition that they cannot be expected to act upon anything that is sent to the WWAG.

Additional insights

A uniform approach will be necessary across city districts to realize touchpoints, and needs to be set up together with the police. There should be one responsible municipal official per ward or city district, and there has to be back up for that person.

The municipality needs to keep in mind certain actions will happen as a result of touchpoints. Then there has to be an approach on how to deal with them, and the backend has to be ready for it.

In the final design, it should be explicit for every touchpoint what the municipality (and the police) should do to realize that touchpoint. This gives more guidance towards the execution.

5.4.3 Limitations

It was only evaluated with the direct client, not with employees from the municipality that would have to implement the policy or would directly facilitate the touchpoints. Those are necessary to get a more extensive and deeper understanding of the requirements for and consequences of implementing touchpoints.

The touchpoints were also not evaluated with the police. Because the municipality should work closely together with the police, it is also necessary to know more about what the requirements for implementation from the police would be.

5.5 Conclusion

In this chapter the design proposal is developed and evaluated by coordinators of NWAG's and by the client. Paragraph 6.3.1 presents the conclusions for the coordinator evaluation, and paragraph 6.3.2 the conclusions for the client evaluation.

5.5.1 Conclusion for evaluation by coordinators

Six coordinators evaluated the coordinator journey itself and the touchpoints. Participants found that the coordinator journey was mostly accurate, and in combination with the touchpoints they found that all aspects of coordinating groups were addressed in the interviews. Touchpoints that indicate that the government takes the coordinator and his job seriously, that promote personal contact with officials face-to-face next to digital contact and that are straightforward in their goal and approach are rated high. Touchpoints that deviate from the topic of neighborhood security, that promote competition to get better engagement from residents, that make things too official or strict and that make the coordinator a visible entity are rated low.

5.5.2 Conclusion for evaluation by client

The client evaluated the touchpoints on the investment to be made to realize the touchpoints. The investments for implementing most individual touchpoints are low, but sequencing multiple touchpoints can add up making the total investment cost high. Therefore, a clear division between the minimum sequence of touchpoints and touchpoints that add something should be made. Also, the municipality desires a uniform approach that can support groups over a long term. The design should give insight in how that is done, and what that means for the investments over time.

These insights are used to reformulate the design guidelines shown in chapter 4. Based on the guidelines presented in chapter 6, touchpoints are chosen that together support NWAG coordinators throughout the phases in their user journey. This support service that the municipality can offer is presented in chapter 7.

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Chapter 6

Guidelines for providing support to neighborhood WhatsApp groups

This chapter presents seven guidelines for providing support to neighborhood WhatsApp groups (NWAG's). The design brief already had preliminary guidelines (chapter 4), that have been adjusted according the insights from the user evaluation in (chapter 5). The guidelines presented in this chapter are of direct relevance to the touchpoints included in the support service presented in chapter 7.

6

◀ Fig. 29 – NWAG members put stickers on bins, street signs, street lamps and other things in the public space to mark their neighborhood as a NWAG area (own photo)

1 **Keep it about safety**

Coordinators stress they want their NWAG to be there to improve safety. The shared information as well as activities related to the NWAG should have the purpose of improving safety in the neighborhood.
Deviating from the topic via the coordinators of NWAG's is only contributing when there is a link to safety. It is for instance possible to employ activities to let residents of a street keep an eye on a demented woman, by letting the coordinator send personal messages to the direct neighbors of the woman. This should be consulted with the coordinator of how to do this.

2 **Present information and activities straightforward**

The purpose for every piece of information and activity must be evident, so that it becomes obvious to use that. When the goal is fuzzy, it is likely that coordinators will not adopt it, because they do not know what to do with it. Being a coordinator is a second job for people, so they want clarity right at the start.

3 **Aim to include coordinators in decision making and realization**

In setting up the WWAG and related activities, it is very important to include coordinators in decision making and realization. They will have their own ideas on what would be good agreements for the WWAG and have ways to improve things that the executing municipal officer and ward police have not thought of. This gives the possibility to discuss and explain what is and is not possible for each member of the WWAG. Another interesting possibility is that coordinators that are eager to do more for their neighborhood surface through these discussions. They can be used to take over organizational tasks the municipal officer has to execute, or to expand the activities performed by the WWAG community. For instance, enthusiastic coordinators can promote and set up groups in areas that are not yet covered by a NWAG.

4 **Do not impose obligations**

Coordinators want to exchange information with other coordinators, the police and the municipality. They want to maintain self-determination in organizing their own NWAG and what they do and mean for the WWAG. Coordinators most certainly do not accept a WWAG that imposes all kinds of obligations on them.

Make clear agreements for mutual understanding 5

Not imposing obligations does not mean that the WWAG can be a free social group without rules. On the contrary, it is very important to make clear agreements on what is and is not shared in what way in the WWAG. There has to be mutual understanding between all users of the WWAG, so the coordinators and involved municipal and police officials.
Because the municipality and police are initiating the WWAG and are viewed as the leader of it, they are the ones to maintain the agreements. Mainly when the WWAG is just started, coordinators are not likely to immediately understand the purpose. With kind yet clear reprimands municipal and police officials should correct the behavior of the coordinators as well as explain why those messages are not desired. Explaining why really contributes to more mutual understanding about agreements, and why it is or is not possible for the municipality or police to deal with certain messages.

Show appreciation in person 6

Coordinators desire to have personal contact with everyone involved with the WWAG. They want to see the faces behind it. It means a great deal to coordinators to be invited to by the municipal official and (ward) police. It is a token of appreciation and confidence to coordinators, and they feel taken seriously because of it. It is key to provide personal contact and offer the possibility to discuss what is going on in the neighborhood.

Provide practical tools 7

Mainly when starting a group, coordinators want that workshop feeling where they have all the tools they need. Those practical tools can be promotional materials, but also simply someone to discuss the to-be-set rules for the NWAG with. Touchpoints should make sure to provide these tools. They make coordinating a NWAG easier and less time consuming. This means that it becomes more attractive to become a coordinator.

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Chapter 7

A support service for neighborhood WhatsApp groups

In chapter 5, the designed support service touchpoints are evaluated. The evaluation showed that designing a service to support neighborhood WhatsApp groups (NWAG's) through different touchpoints is promising. This chapter presents a selection of twelve touchpoints based on the refined insights into the coordinator's desires acquired in chapter 5. The touchpoints form a complete support service for coordinators of NWAG's. This chapter also shows the implementation of touchpoints, based on the evaluation with the client in chapter 5. The design for the support service forms the end of this project, that is concluded in chapter 8.

7

◀ Fig. 30 – NWAG street sign in neighborhood in The Hague (own photo)

7.1 Service design

The municipality of The Hague has expressed the aim to support NWAG's. This project aimed to design support for coordinators of NWAG's focusing on improving safety. The goal is to create ward WhatsApp groups (WWAG's) in the municipality of The Hague that connect coordinators of NWAG's, police and municipal officials on ward level. In the WWAG information regarding safety in a ward is shared. Coordinators of NWAG's can filter information so that the amount of shared information reduces, and the police and municipality can better deal with and act upon the shared information. Also, engaging in this way ensures privacy for residents better, because the information in the NWAG is not visible for the police or municipality unless it is forwarded by the coordinator.

The support should be designed with the purpose to guide residents in starting their NWAG, connecting as a coordinator to the WWAG, and to give the outlines for a well-performing WWAG. In order to do this, the phases coordinators go through in using a NWAG have been mapped in a coordinator journey. Based on the coordinator journey, touchpoints are developed that provide the right support, through the right interaction at the right moment along the coordinator journey. The next paragraphs discuss the coordinator journey and touchpoints in more detail. An overview of the coordinator journey and the touchpoints is found on the next spread (fig. 30).

7.2 Service design

The coordinator journey consists of six phases, based on insights from interviews with users (chapter 3 and 5).

[phase 1: before the start of a NWAG] Before a NWAG exists, a resident notices issues with the safety in his neighborhood. He wants to actively do something about these issues. The resident finds out a NWAG can be used to improve safety, and that there is no such WhatsApp group yet. If the resident does not perceive the NWAG as a possible solution, his journey stops here.

[phase 2: the initiative to start NWAG] The resident decides to start a NWAG. He has to get neighbors to join the group. They look for support that can help them with enthusing neighbors. The support preferably comes from police or municipality, because the NWAG gets a more official status when police and municipality stand behind it. When involving the neighbors for some reason does not work out, the group is not started.

[phase 3: setting first agreements for NWAG] Upon having made the WhatsApp group and adding several neighbors to it, coordinators realize they have to manage the conversation so that it can function to alert each other. They set some basic agreements for this and reprimand or remove a member that does not abide by these. All members of the NWAG have to get used to what is and is not allowed. Some NWAG's do not get through this phase, because they do not find a social norm.

7.3 Touchpoints

[phase 4: running NWAG] The NWAG is now running as it should and members know what kind of messages are and are not allowed. The coordinator discusses with members whether or not certain specific issues should be alerted in the group, for instance when a dog is lost. The coordinator occasionally has to add neighbors to the group or reprimand them about messages that are not allowed. When many members leave the group, members do no longer alert issues to the NWAG, or when the coordinator quits and there is no follow up, the NWAG can end.

[phase 5: connecting to WWAG] The NWAG can function on its own, but coordinators find that with a connection to surrounding neighborhoods, the police, and the municipality, more information can be exchanged about the safety situation. This makes the NWAG more effective in their opinion. They try to connect to a WWAG, that contains all coordinators of a ward, the police, and the municipality. It is a setback if others do not want to collaborate to make the ward safer.

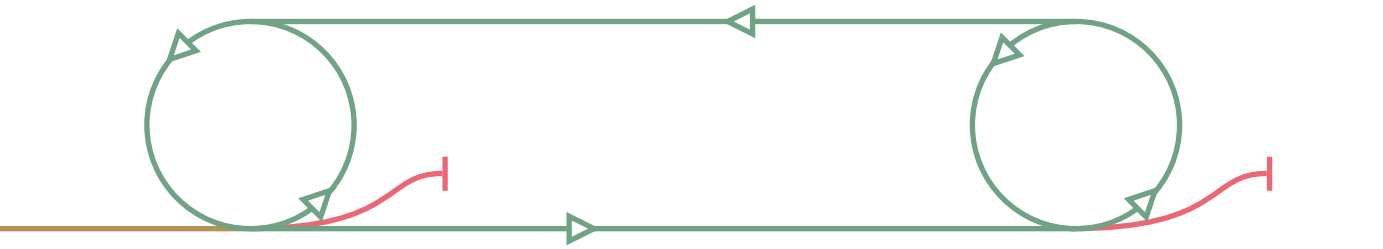
[phase 6: running WWAG] The coordinator is connected to the WWAG and passing on messages from the WWAG to his NWAG and vice versa. He thus stays part of the running NWAG as well. The coordinator can also participate in activities organized for coordinators by the municipality and police. It is possible the coordinator leaves the WWAG when not agreeing with the way of working, or that the WWAG ends when the police and municipality cease their support for it.

A sequence of touchpoints was designed to support coordinators. To design the touchpoints, seven design guidelines were formulated (chapter 6):

1. Keep information as well as activities about safety-related topics.
2. Present information and activities straightforward, so that the purpose is evident.
3. Aim to include coordinators in decision making about WWAG setup and execution of certain tasks that maintain the WWAG.
4. Do not impose obligations for coordinators to become a member of the WWAG.
5. Make clear agreements between all WWAG members for mutual understanding.
6. Show appreciation for coordinators in person.
7. Provide practical tools that support coordinators.

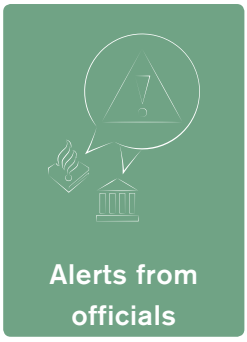
With these guidelines, twelve touchpoints were designed that answer the desires of coordinators along their journey. The touchpoints and their implementation are discussed starting on page 68. Several underdeveloped touchpoints are presented that are very promising based on the user evaluation. The paragraph concludes with how the 12 are sequencing each other.

Fig. 31 – Coordinator journey and touchpoints of support service



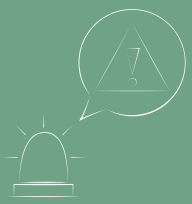
4 coordinating the NWAG	5 connecting to WWAG	6 member of the WWAG
* keep on doing tasks from previous starting phase, but less frequently * finding ways to improve the NWAG, e.g. to share more information	* Get in touch with ward agent, municipality, other coordinators in ward. * Being contacted by someone starting or in a network.	* Send alerts from NWAG to network and vice versa * Go to meetings for coordinators * Help other (starting) coordinators in ward

Street signs



Alerts from officials

Alerts between neighborhoods

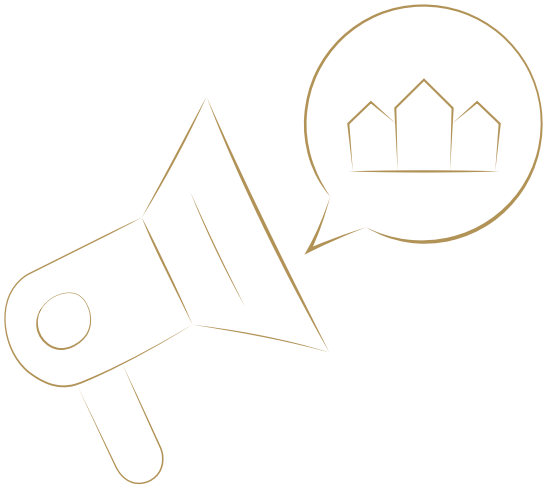


Connection with alarm central

Preventive info from officials

Half-yearly meetup

Education from safety experts



7.3.1 Campaign to start NWAG's

What

A campaign to give residents interested in NWAG's information about starting their NWAG and to let coordinators sign up their NWAG at the municipality.

Why

Residents with an interest in coordinating NWAG's and coordinators need to know they will now receive support and where to get that support.

How

All residents should get to know NWAG's and the support the municipality offers for them. Therefore, the campaign should clarify the following points:

- Residents are requested to start a NWAG in their neighborhood to improve safety in the neighborhood.
- Briefly explain what a NWAG is and does.
- The aim to start a network of NWAG's on ward level, in order to better inform residents about safety-related issues in the neighborhood.
- Coordinators that (already) started a NWAG's are requested to sign their groups up at the municipality website or at an affiliated website such as Alerteburen.nl or WABP.nl.
- Briefly showing what the steps are after signing up the group.

The campaign should be set up in multichannel format. Possible channels are illuminated advertising signs and posters in the public space, advertisements in city or ward newspaper and online advertising, and letters or flyers send to every resident. After getting to know NWAG support is available, it is important for

residents to have easy to find and clear information on the website of the municipality and in the city district offices and the municipal helpdesk.

The campaign has to be done at least at ward-level, because that would be the area for coordinators to get together. Rolling out the campaign in relation to issues that are currently playing in the ward may improve the impact, because the incentive for people to do something about safety is higher.

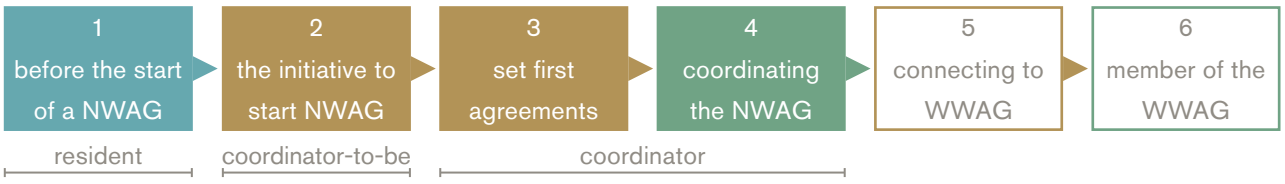
Some coordinators already have signed up their groups at Alerteburen.nl or WABP.nl to be findable for their neighbors. Those coordinators get annoyed if they have to sign up again. Both websites offer contact details to municipalities against payments. The campaign could also include contacting those coordinators via phone, email or mail. These coordinators would feel more respected and included.

When

The campaign has to be aimed at future and current coordinators. Residents that become a coordinator after the campaign, pick up in the first phase of their coordinator journey. Coordinators-to-be that already aimed to start a NWAG, and can get extra support, see the campaign in phase 2. Lastly, residents that already started the NWAG, see they can now get connected with the government in phase 3 or 4.

Implementation requirements

- Decision on giving support and how this will be implemented in consultation with city district office(s) and (ward) police.
- Campaign design: which channels are used, what is communicated via each channel to reach coherence and the exact texts and layout per channel.
- Instructing employees from city district offices and the municipal helpdesk on the newly available help for NWAG's.
- Campaign promotion: executing the campaign, so sending letters, placing advertisements, putting the website online.



7.3.2 Sign-up form

What

A form to sign up as a coordinator of a NWAG in order to receive support from the municipality.

Why

The aim of the sign-up form is to collect contact details of coordinators, so that they can be placed in a network. It is otherwise impossible for the municipality to know who the coordinators are.

How

The sign-up form can be placed on the website of the municipality or can be a physical form to be sent by mail or delivered to the city district office. The following details should be included on the form:

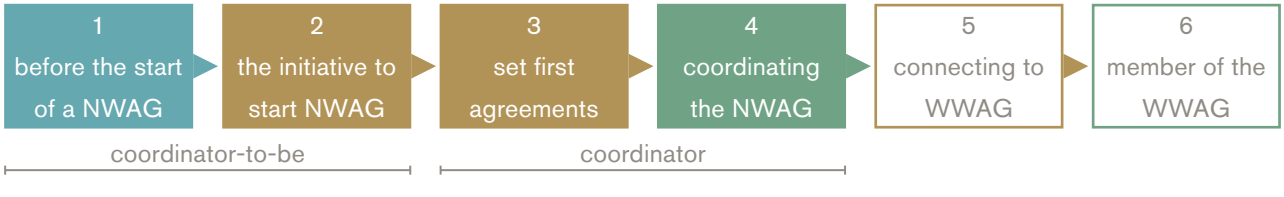
- Contact details of coordinator: name, phone and address
- Area of the NWAG of the coordinator
- Optional request to be placed in WWAG
- Optional request to receive a starter kit
- Optional request to receive street signs
- Agreement with terms and conditions of form.

Information should be included about the purpose and basic agreements of the WWAG, about what the starter kit contains and about the identity materials, so that the coordinator can make a choice whether he is going to request those things.

After filling in the form, the coordinator should receive when the coordinator is placed in the WWAG and when he receives the starter kit and identity materials.

When

After seeing the campaign to start NWAG's, a resident can be interested in starting a NWAG. In that case he uses the sign-up form in phase 2. If a coordinator



with a running NWAG is mainly interested in receiving support for his NWAG and being in touch with the police and the municipality, he uses the sign-up from in phase 4.

Implementation requirements

- The form has to be developed and placed on the website of the municipality.
- The legal part about signing up and storing the data of the resident has to be clarified.
- WWAG setup, starter kit and identity materials are ready.
- Arrangement for communication of contact details of coordinator to WWAG responsible from city district.
- Arrangement for communication of contact details to send out starter kit and place street signs.

7.3.3 Starter kit

What

A 'toolbox' to start a NWAG, including a welcome letter, promotion materials, basic agreements and NWAG stickers to hand out to residents.

Why

The starter kit makes it easy to start a NWAG and helps to solve practical issues that are experienced by coordinators.

How

The physical kit is sent to the coordinators home after he requests it for the signup form. It includes the following items:

Welcome letter

The welcome letter is made for the coordinator. It shows the appreciation of the government for starting a group. It also shows the steps the coordinator has to take to start a NWAG:

1. Promote NWAG's with neighbors and collect their phone number to be placed in the group using the promotional materials.
2. When residents shared their contact details to be added to the NWAG, inform them about the basic agreements. It is recommendable to send

a photo or PDF with the basic agreements to the residents. These can be found on the website of the municipality.

3 Make them a member of the WhatsApp group and hand out stickers to them. Make sure the communication in the NWAG is manages according to the agreements.

Thereby, the contact details of the municipal or police official (touchpoint 4), and if possible of the experienced coordinator (touchpoint 5), are in the letter, so that the coordinator can get in touch if he needs further help or wants to be connected to the WWAG.

Promotional materials

The coordinator can use the promotional materials to inform his neighbors about the NWAG. It can for instance be a flyer that the coordinator can deliver by mail or use in going along the doors. The promotional material includes personalization to the neighborhood: it shows the neighborhoods name, the name of the coordinator and his contact details. Also, instructions on how to contact the coordinator are included.

Stickers

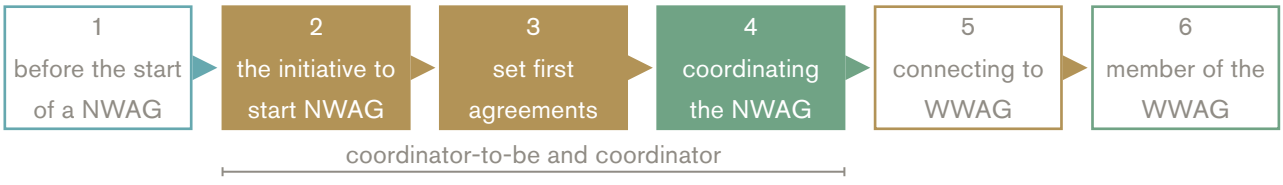
Coordinators hand out stickers that members can put on their door so that the group becomes more visible in the neighborhood. The stickers can also form a means for having an interaction between the coordinator and the members of the group.

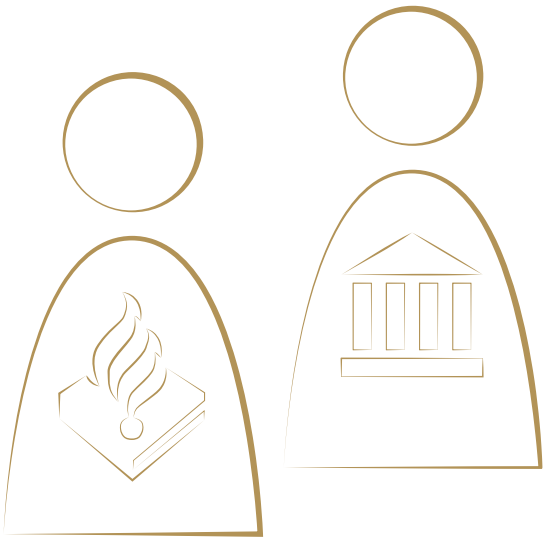
When

The coordinator can use the starter kit during phase 2 to promote the group. Occasionally members are added during phase 3 and 4, so that the stickers from the starter kit are used then as well.

Implementation requirements

- Design of the starter kit and its materials, including the basic agreement photo or PDF.
- Set up a website page on the municipal website where the coordinator can download the basic agreement photo or PDF.
- Making sure all ward officials are known for the welcome letter.
- Setting up the promotional materials so that they can be adjusted to the coordinator based on the contact details he has used for the sign-up form.
- Printing starter kit materials and sending them to the coordinators when they have signed up.





7.3.4 Contact a municipal/police official

What

In order to be added to the WWAG and receive the street signs, a municipal or police official gets in touch with the coordinator. The coordinator can also use this contact in case there are issues at play in the neighborhood, additionally to calling the emergency center.

Why

The municipal/police official can check whether the coordinator really has a NWAG. When that is verified, he can add him to the right WWAG and place street signs in the neighborhood of the NWAG.

Also the coordinator needs to be able to contact the municipal official and ward police to get help for issues they have in starting the NWAG and to exchange information about the neighborhood in case they find this necessary. By being able to directly contact officials that are relevant, coordinators feel much more appreciated and enabled to mean something for their safety. The application of this touchpoint is very wide and overlaps with a lot of phases on the coordinator journey. It shows the willingness of municipality and police to actually be involved with coordinators.

How

After filling out the sign-up form, the municipal or police official gets in touch with coordinator as soon as possible. He does this by phone or a WhatsApp message. Then he places the coordinator in the right WWAG and orders the street signs to be placed in the neighborhood. The municipal or police official can also help the coordinator-to-be to start his group, by giving him information on how to approach this.

Before placement in the WWAG, the agreements of the WWAG are discussed and send to the coordinator. He then agrees to always contact the emergency center in case of an imminent issue. However, the coordinator can now use the contact details of the police or municipal official in case something is going on in the neighborhood, for instance when he suspects marihuana cultivation or when for the third

week in a row there is nuisance and left beer cans in a playground from people that are drinking beer there in the evening.

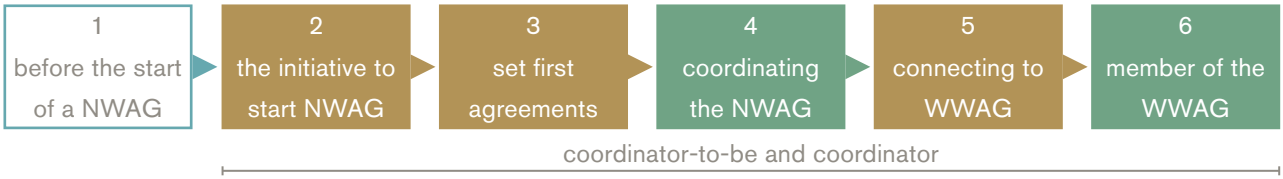
Over time, some of these tasks can be taken over by an experienced coordinator (touchpoint 5).

When

Again, it is depending on whether the coordinator just started or has a running NWAG already, where he first gets in touch with the municipal or police official. However, these officials help him from that moment on and are still reachable in phase 6.

Implementation requirements

- Willingness with municipal officials of city districts and (ward) police to support NWAG coordinators.
- Appointing the task of doing the first contact to one of the officials.
- Contact with current supporters of NWAG coordinators, for instance in Amstelveen and Zoetermeer (user research in chapter 3), to discuss how they approach this contact.
- Guidelines on how to approach this contact, that are also communicated to coordinators.
- The municipal official and police must communicate to the coordinator when they cannot respond to a request they send and explain why they cannot do that. That is the only way to make sure that coordinators send only what is relevant for police and municipality.



7.3.5 Help from experienced coordinator

What

Experienced coordinators get in touch with residents interested in starting a NWAG. They help them to set up their NWAG.

Why

Starting coordinators simply have a lot of questions, and it helps them to see how someone else is tackling his NWAG. Some experienced coordinators are super enthusiastic, have time and want to do more for their ward. They should be given the possibility to do so and letting them promote and help to set up NWAG's in areas without a NWAG, can be a for them to do more. This can also take away some tasks the municipal officials and ward police have to do.

How

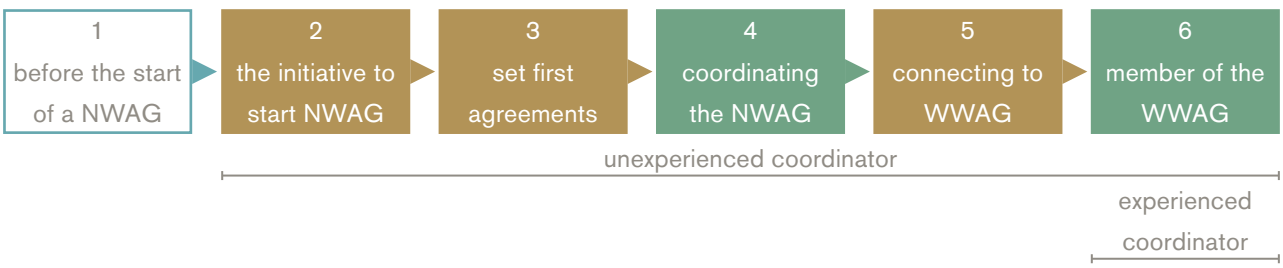
The experienced coordinator can promote NWAG's in areas without a NWAG. He gets materials to do so. When a resident signs up as a coordinator for a NWAG, an experienced coordinator gets in touch with him to add him to the WWAG and to ask if he needs help with anything in starting his group. This takes away some tasks from the municipal official as well.

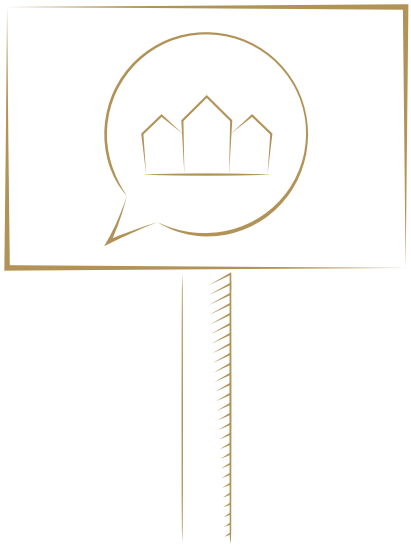
When

From the moment the coordinator has filled in the sign-up form until he is in the WWAG, an experienced coordinator can help him. The experienced coordinator has a running NWAG and has been in the WWAG for a while, so he is in phase 6.

Implementation requirements

Those enthusiastic coordinators in a NWAG are offered that they get in touch with new coordinators instead of the municipal official.





7.3.6 Street signs

What

Street signs to be placed in the neighborhood where the NWAG is active.

Why

Residents find that marking their NWAG neighborhood helps to discourage criminal activities and nuisance. Residents find the NWAG street signs do not contribute as much to proliferation of street signs as other types of signs.

How

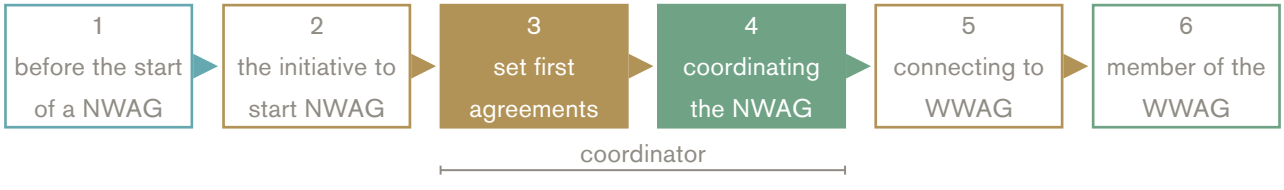
The coordinator can request the street signs with the sign-up form (touchpoint 2). The municipal or police official gets in touch with them to verify their NWAG exists (touchpoint 4). Then he orders the street signs. NWAG street signs should be placed at every entrance to the neighborhood, according to NWAG members. The municipality is responsible for placing these signs.

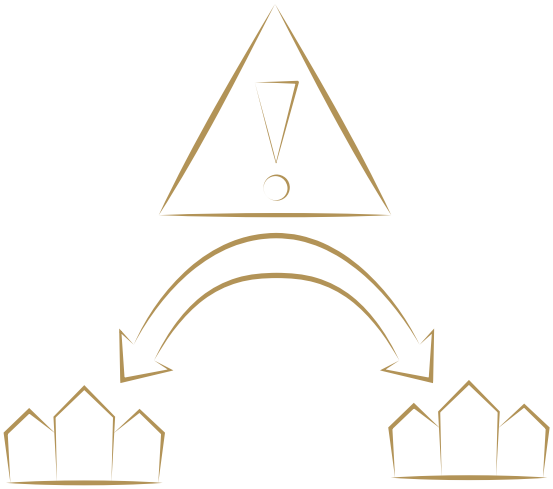
When

Upon having started their NWAG, so in phase 3 and 4.

Implementation requirements

- Set up of a policy by the municipality on where (not) to place street signs.
- Design and production of the street signs.
- Payment for placing the street signs: preferably it is paid by the municipality, but otherwise the municipality has to come up with a payment plan so that residents can buy the signs together.
- Placement of the street signs by the municipality.





7.3.7 Alerts between NWAG's

What

The coordinator sends alerts that are of relevance to the ward from his own NWAG to the WWAG, so that other coordinators can share it in their NWAG.

Why

Coordinators like to contribute to safety in the whole ward as well as their neighborhood. If an issue is alerted in their NWAG that is of importance other areas in the ward, they want the possibility to forward this alert to the WWAG. Some WWAG's elsewhere have the agreement that coordinators cannot send alerts, which is frustrating them. This is a way to support the networking of residents in a whole ward. Because the rules for NWAG's are to first notify the alarm center, the connected police or municipality in the WWAG does not have to act upon the alert.

How

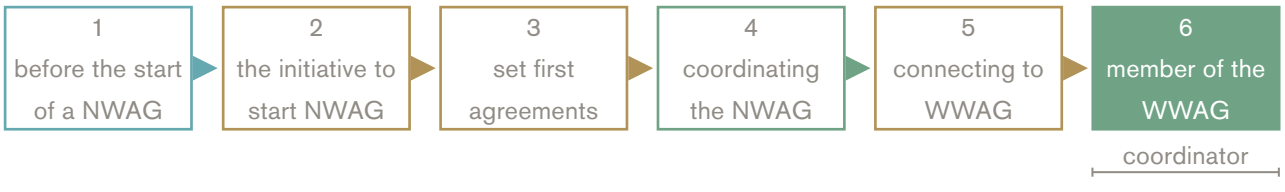
If an alert is made in the NWAG that is of relevance to the whole ward, this alert is forwarded to the WWAG, using the forward function of WhatsApp.

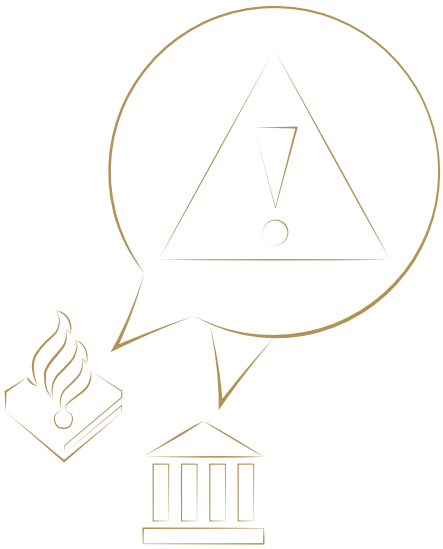
When

During phase 6, when the WWAG is running.

Implementation requirements

Only one thing is necessary for implementing this: a WWAG where all coordinators in a ward are connected and allowing them to pass on alerts.





7.3.8 Alerts from ward officials

What

Coordinators send alerts made by the municipal officials or (ward) police in the WWAG to their NWAG's.

Why

WhatsApp is a natural way for residents to receive information. For municipal officials or (ward) police it can be handy to alert the whole ward quickly or request the help of residents regarding specific incidents. Coordinators are more than willing to share this with their neighbors. An example of an alert is when the only and main road into the ward is closed down because of an accident.

How

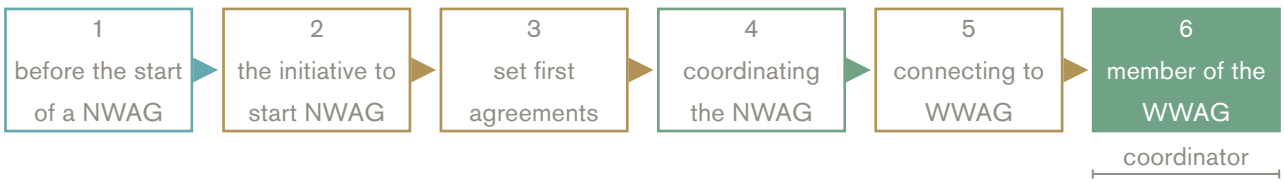
The municipal official or (ward) police use publicly available information to make these alerts. It is of importance to end requests with how residents should contact the government. This is not via WhatsApp, but for instance by calling the alarm center.

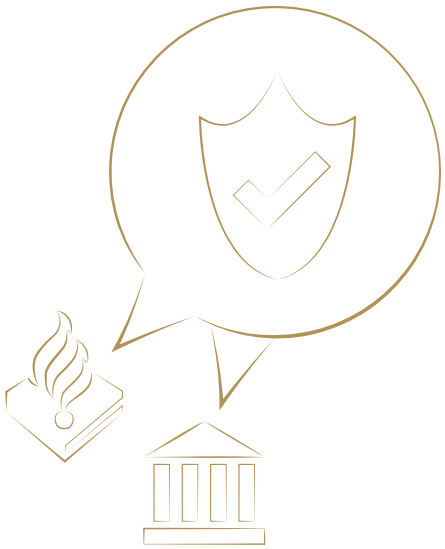
When

During phase 6, when the WWAG is running.

Implementation requirements

The only thing necessary is a WWAG and the notion with the municipal official and ward police they can pass on information in this way.





7.3.9 Prevention tips from ward officials

What

Coordinators forward information the ward police or municipal officials send to the WWAG that helps residents to protect themselves against certain issues. For instance, when travelers swindle residents out of money, information on how to recognize their tricks.

Why

Residents want to receive this information about what is happening in their ward to protect themselves. WhatsApp is a way for them to receive this information in a way that is natural to them.

How

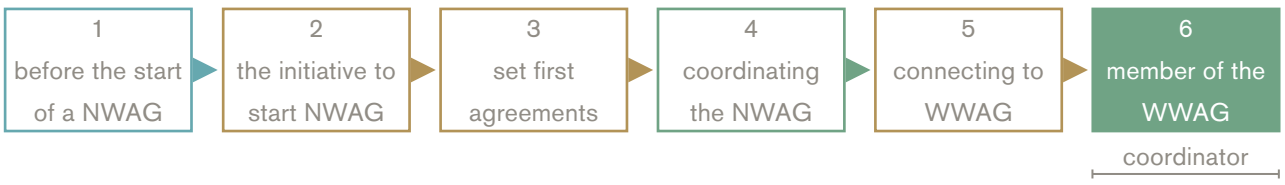
When necessary, a simple WhatsApp text message can be used to give the information via the WWAG. However, municipal officials and ward police can also think of setting up a bi-weekly or monthly newsletter in a PDF format that informs residents of what is going on. The use of photo or video is also possible of course.

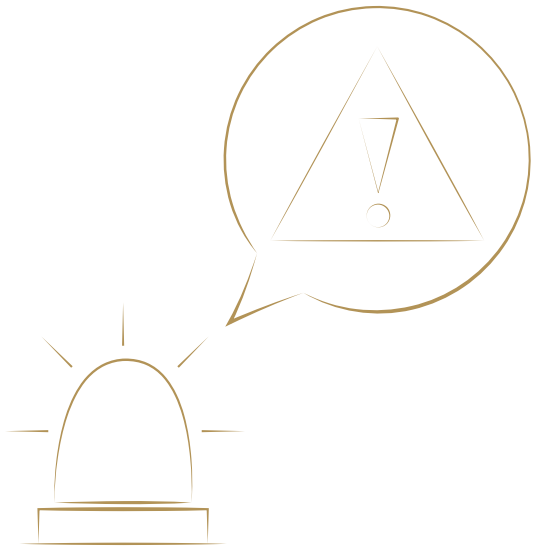
When

During phase 6, when the WWAG is running.

Implementation requirements

A working WWAG all ward coordinators are connected to, and the initiative with municipal officials or ward police to send this information is necessary.





7.3.10 Requests from alarm center

What

The alarm center of the Hague is already sending requests to networks of NWAG's in among others Zoetermeer and Delft. These requests are about looking out for suspects or missing children, or for anything else regarding an incident in the ward.

Why

Via WhatsApp, a lot of residents spread over the whole ward are reached. For the police this is a desirable means to retrieve information on specific incidents that are happening in the ward. Coordinators find that sharing this information helps with catching criminals and actively helping to make the ward safer.

How

The alarm center has a phone number that is added to the WWAG, so that they can send information to it. They do not respond to replies to their request, but in this message ask residents to call the alarm center to inform them.

When

During phase 6, when the WWAG is running.

Implementation requirements

A working WWAG all ward coordinators are connected to.

7.3.11 Half-yearly meetup

What

Every half-year a meeting is organized for coordinators in a ward. The goal is to get to know each other and reflect on the current state of safety in the ward and how the network is helping the ward.

Why

Coordinators desire to have personal contact with other coordinators and with the municipality officials and ward police. They want to have a face with the people that are in the group. Coordinators experience these meetings as a sign of appreciation.

How

Every quarter or half year all coordinators connected to the WWAG are invited for a meeting with the municipal officials and ward police. The current state and developments in the ward are discussed, as well as proposals for the future. The atmosphere is informal. Coordinators are asked for their opinion on proposals, but also for input on certain issues. It is also discussed how the WWAG is working, and if anything needs to be changed to make it better.

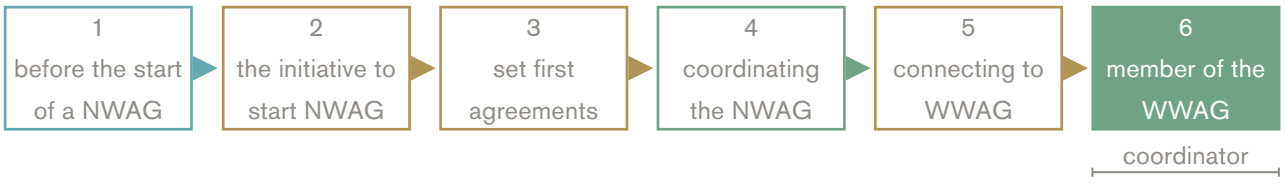
This meeting can be used to kick-off the existence of the network. Then it helps to discuss the agreements for the network and the expectations of all parties.

When

During phase 6, when the WWAG is running.

Implementation requirements

- A meeting place and time needs to be set by the municipal official and the ward police.
- Invitations need to be sent to all coordinators.
- An agenda needs to be made for the meeting, as well as some preparations from the ward police and municipal officials for their parts of input.



7.3.12 Education from experts

What

The coordinators receive workshops on how to improve safety in the neighborhood. All kinds of topics are covered: recognizing suspicious behavior to making houses fireproof.

Why

The user research showed that coordinators feel appreciated when they receive this education. Gifts or credits in a competition do not appeal to coordinators, they would rather receive actual help with their issues in coordinating their NWAG and expanding their knowledge about safety in order to help the neighborhood.

How

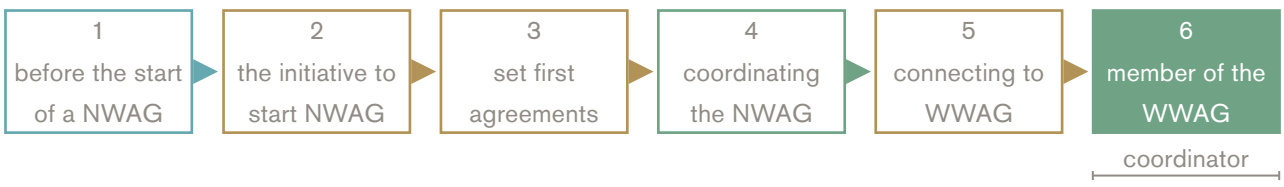
Every half-year or quarter a course can be offered, possibly connected to the meetup. The course is given by experts in the field.

When

During phase 6, when the WWAG is running.

Implementation requirements

- Find workshops that are interesting. It works to connect it to current issues in the ward, or to ask coordinators what they would like.
- Plan the workshop, with a room and for the workshop facilitator, and send invitations to all WWAG coordinators.
- Build up a city-wide database of interesting workshops for coordinators, that all municipal officials and ward police can use.



7.3.13 Additional promising touchpoints

Online coordinator forum

At the moment, the nationwide exchange of ideas for NWAG's is minimal. It could help to get an online forum where coordinators of NWAG's can exchange ideas and ask questions to get this going.

Second coordinator

To get more security for the continuation of NWAG's, it helps to have a second coordinator. This should be supported from the WWAG's and interested NWAG members should have the possibility to join a coordinator meeting without obligations.

Trial run of WWAG

Similarly, coordinators should have the possibility to do a trial run as a member of the WWAG. They can then see what is going on there and if it will help their NWAG.

Ward dashboard

To make the statistics that the police collects about neighborhoods visible, it would be good to have a dashboard for the ward. *"Hoe veilig is mijn wijk"* from the police unit of The Hague does this {hoeveiligismijnwijk:vz}. However, this is not very up to date, as it only shows what happened two months ago and before. It also does not offer a way to see hotspots and how to prevent current issues. It is advisable to make the platform (almost) realtime and to connect issues to their prevention. This dashboard could also be used by residents that are not a member of a NWAG.

Campaigning during aftercare

Ward police gives aftercare after high impact incidents such as housebreakings. This aftercare is a great moment to recommend starting a NWAG, because victims feel the incentive to prevent this from happening ever again.

7.3.14 Touchpoint sequencing

To conclude the presentation of touchpoints, scheme describing how the touchpoints are sequencing each other is made (fig. 31). It all starts with a campaign to make NWAG's and the support from the municipality public. Then residents that are interested in starting a NWAG, or have a running NWAG already, use the sign-up form to give knowledge to the municipality their NWAG is there (1). To help them start it, they get send a starter kit (2). Their contact details is sent to the municipal or police official (3), that can order street signs for their neighborhood (4), and place them in a WWAG (5). If there are experienced coordinators that want to take more responsibility for running the WWAG, the contact details can also go to experienced coordinators (6), that can place them in the WWAG (7).

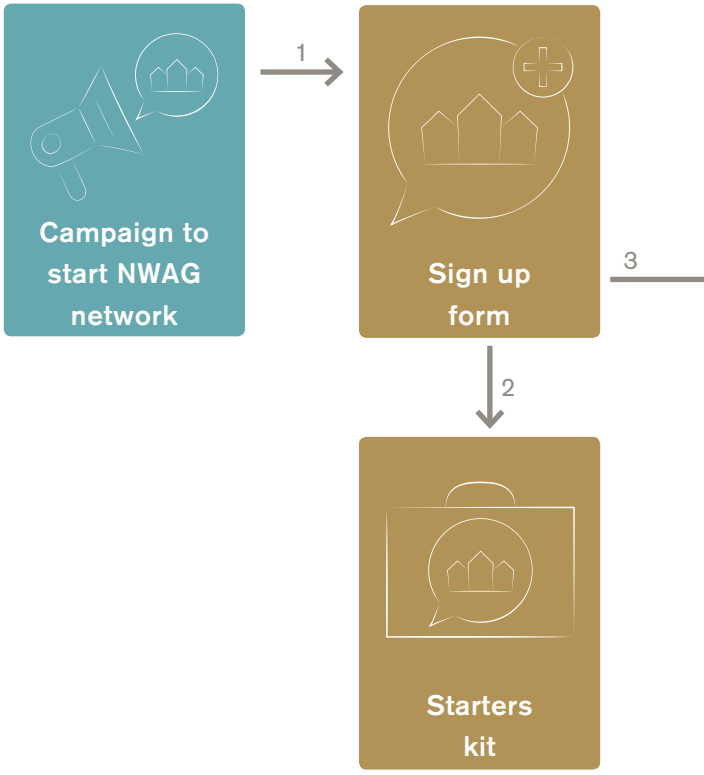
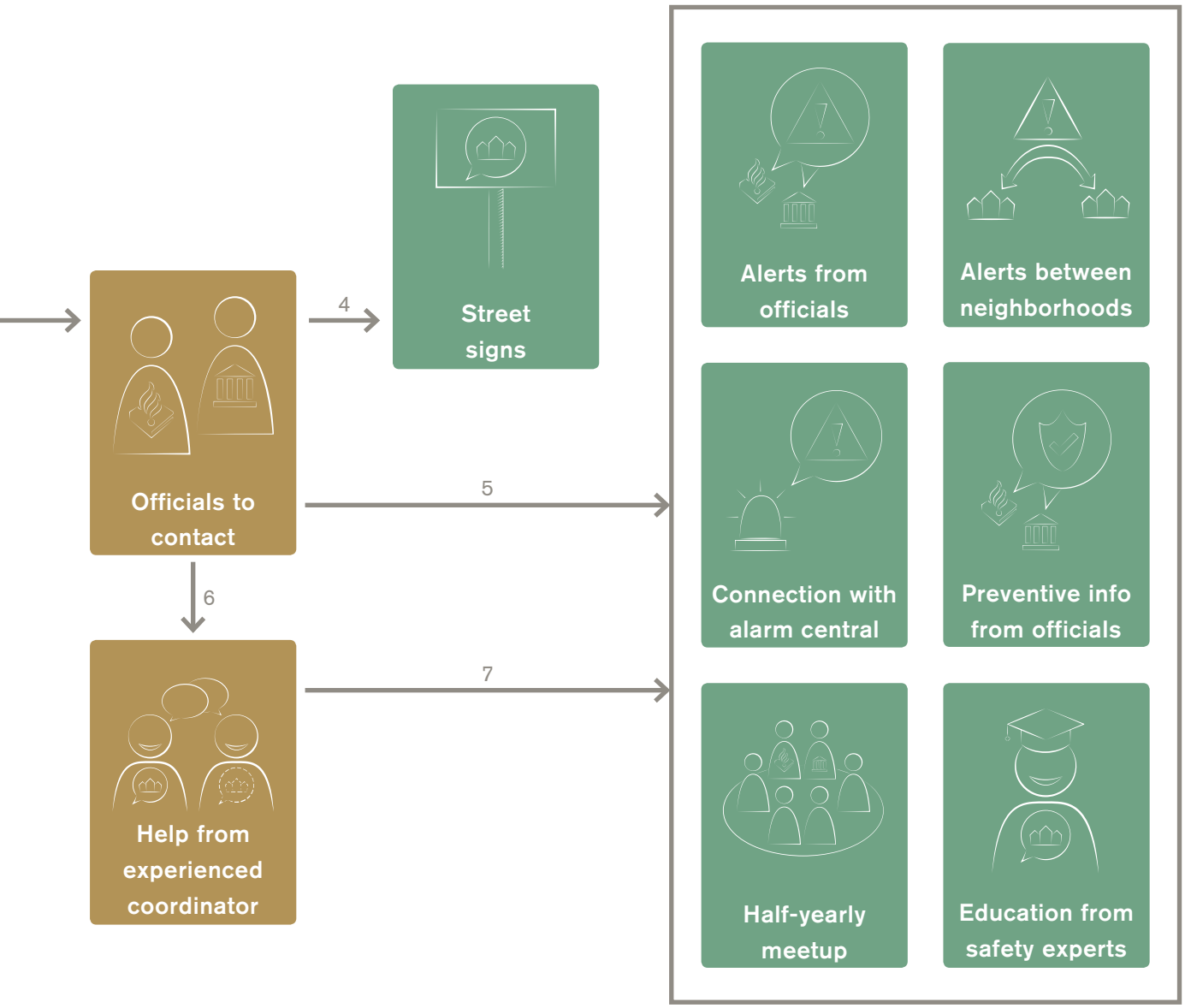


Fig. 32 – Touchpoint sequencing


Officials to contact
4
Street signs
5
6
Help from experienced coordinator
7
Alerts from officials
Alerts between neighborhoods
Connection with alarm central
Preventive info from officials
Half-yearly meetup
Education from safety experts

7.4 Support service implementation

Next to the requirements for specific touchpoints, several things are required to implement the entire service. They are explained in this paragraph.

Policy regarding NWAG's

The coalition agreements for 2018-2022 shows the municipality wants to support NWAG's (Gemeente Den HaagDen Haag, Stad van Kansen en Ambities, 2018). To make this reality, the municipality should make sure there is a city-wide policy on how to deal with NWAG's. This ensures a systematic approach and a coherence between wards and helps to find funding on a longer term.

Collaboration with police

The municipality has to collaborate with the police to further develop the approach and implement it in all wards. The police have information about safety in the ward that is of interest to residents. This information should be communicated to the NWAG's, to ensure their success.

Someone responsible for NWAG initiative per city district

Per city district there has to be a person responsible for the NWAG network. This person has to initially set up the network. It is important to keep in mind that some city districts or wards already have a network. In that case the work of this person becomes to find out how the municipality can help this network, rather than setting up a new network.

Support per ward

With providing support, it is very important to be clear on what the (ward) police and municipal official can and cannot do for coordinators (guideline clear agreements). The advice is to look per ward and neighborhood what is necessary and possible. When little people sign up for the NWAG, it might help to go by the doors together with the coordinator to involve people. When a network is set up, maybe some of the questions new coordinators have can be answered by experienced coordinators, instead of putting the workload on government officials. Every neighborhood is different and requires a different approach.

It is key to involve coordinators in the decision-making process. Ask coordinators what they think is necessary, let them share their priorities. They might come to different conclusions as you do, but that shows a point for discussion and reflection.

Investments

For creating and maintaining NWAG networks, funding should be available. To start up networks, investments need to be made, but over time the necessary funding will decrease and stabilize, as most NWAG's already joined the network and know how it work. Than what needs most investments is the half-yearly meetups and the education.

To set up the networks several things have to be put in place:

- A responsible per city district has to be appointed. He needs to settle in this job and has to figure out with the police how to exactly approach the network.
- The campaign has to be designed and started. It is preferable to do this for one city district as a whole. The designs can however be reused in other districts.
- The signup form, identity materials and starter kit have to be designed, which is the same for all districts.
- At first, it is likely a big batch of coordinators will sign up. A kickoff meeting with them is desired to introduce the network and set the goals and agreements for the network.

Funding continuously has to be available to:

- The municipal official needs to manage the network. Managing consists of adding coordinators, address coordinators that do not abide by the agreements.
- The municipal official has to be a contact for coordinators.
- The municipal official has to make messages if something is going on in the ward or when he has preventive information.
- The half-yearly meetup has to be organized by the municipal officer in collaboration with the police.
- The signup form has to be maintained.
- The starter kit has to be sent to coordinators that newly signed up.
- The identity materials have to be sent to coordinators that requested them.

Chapter 8

Conclusion

In the previous chapter the final design for support for prevention NWAG's was developed. This chapter discusses the results and conclusions of the project. Limitations of the project will be presented and discussed, and recommendations for the municipality and for further research are presented.

8

◂ Fig. 33 – The Hague in the evening (photo by Gerrit Vermeulen on Unsplash)

8.1 Conclusion

The aim of this project was to generate knowledge about the use and experience of digital neighborhood communities (DNC's) and to design municipal support for DNC's. In exploring the context of DNC's, it became clear that there are many platforms used to set up a DNC. To project focuses on WhatsApp because it is most used by residents. Residents use NWAG's because it is a tool they already know and find easy to use, and also because the area one WhatsApp group can cover is up to 250 households, which matches the experienced direct environment of the resident.

Through user research, insight into the use and experience of NWAG's that focus on security was gained. Coordinators have a central role in the NWAG as a manager of the NWAG, as well as in support structures elsewhere, because the coordinator passes on information to and from the municipality and police. The coordinators want to be involved with making neighborhoods more secure and setting up and managing the NWAG is a way to do that. Coordinators experience several issues in starting up a NWAG, most importantly enthusing neighbors to become a member and set and maintain rules to restrict communication to safety-related information, but once the NWAG is running, the tasks the coordinator has to perform decrease.

Coordinators want the police and municipality to support the NWAG by sharing information about incidents happening now, longer-term issues, and developments over the last weeks or months. However, the municipality and the police have several assumptions regarding what will happen when they support coordinators. For instance, that the municipality should not support NWAG's because the citizen initiative should stay with residents, or that coordinators will send all kind of messages that the police is not waiting for. Even though these assumptions in reality are either non-existent or resolvable, they hold back the police and the municipality to give (certain forms of) support to citizens.

With this insight, the goal of the project was to design support for coordinators. The desires of coordinators have to be fulfilled, and the design proposal can help the municipality to overcome certain assumptions.

The design proposal is a support service for coordinators of NWAG's, that guides them from along their journey from being interested in starting a NWAG to having a running NWAG and being a member of a ward WhatsApp group (WWAG). The WWAG consists of all coordinators in a ward, an official that is responsible for the ward from the municipality and an

official from the police. The support service consists of touchpoints: points of interaction between the coordinator and the support service. Sixty-nine touchpoints have been evaluated by six coordinators of NWAG's. They mentioned that with a sequence of touchpoints, all their desires can be covered. Participants find it evident and obvious the municipality would offer such support.

Through the evaluation and earlier user research, seven design guidelines could be formulated for offering support touchpoints to coordinators (chapter 6). The final proposal for a support service includes nine essential and three recommendable touchpoints, to follow the guidelines. The municipality of The Hague can use the proposal to inform policies regarding supporting NWAG's. This should be done in close collaboration with the police. Executors of the policy in the city districts and wards can use the support service touchpoints to set up their service. Thereby, the coordinator journey and touchpoints plotted on there, gives a framework to discuss the setup of support across city districts in The Hague and with other municipalities. It can also inform the development of new touchpoints.

Implementing this support service increases awareness of residents towards safety-related issues in their neighborhood because residents are better informed, thus increasing their feeling of safety. Residents more actively look after each other's possessions and know from each other that they do so, which increases their feeling of social cohesion. Coordinators of NWAG's experience that the municipality appreciates their work and takes them seriously, which leads to a more positive attitude towards the municipality as a whole. Through maintaining WWAG's, the municipality and police get access to an informal network covering the whole ward. The network can be employed in time-sensitive situations, e.g. a suspect on the run, and for longer-term issues, e.g. retrieving information about unsafe public spaces in the ward. Participation of residents in their neighborhood increases through the use of NWAG's and WWAG's, as well as participation of police and municipality in the residential environment, because of their improved connections to residents.

Throughout the project the author had the chance to develop on some personal goals. A reflection on those goals is included in appendix T.

8.2 Limitations

In this project, mostly qualitative research has been used to create insights and results. Insights through qualitative research are subject to biases of the researcher and skewed interpretation (Kvale, 1994). This method has however given rich data and understanding of why and how people make use of NWAG's.

The final design is based on the coordinator's evaluation of the user journey and touchpoints. Because of this, it is unclear whether the final design itself is completely answering all desires of coordinators.

8.3 Recommendations

Based on the project, several recommendations can be made to help the development of the support for coordinators of NWAG's. The recommendations go beyond the scope of this project.

Take stock of current support

This project did not include any research into the support currently offered in each ward of The Hague. Through the project, it became clear that the police offer support to NWAG's in the city district Loosduinen and the wards Wateringse Veld and Morgenweide have some kind of WWAG. The city district Leidscheveen for sure has no WWAG's in the various wards. The support that is currently already offered should be mapped per ward, including who gives that support at the moment. This is a starting point for which touchpoints are still necessary in those wards.

Try out rather than wait

The support that is proposed in this report, is a starting point for implementing support. The author recommends trying out the setup for this support first in one ward, learn from that and then roll it out over the whole city. Throughout the interviews conducted in this project, the coordinators showed they are very open to try out things.

Retrieve input from other municipalities and police units

In this project, people from several other municipalities and police units were interviewed on how they provide support to NWAG's. To get an understanding of how they give this support and their experience giving the support, it is insightful to talk with them. It is recommendable to let executors of the municipality of The Hague talk with executors that already have a running WWAG. This can answer questions and clarify concerns they have.

Inclusive NWAG's

Though NWAG's and DNC's in general are seen as tools to stimulate participation, these tools are often hard to use for people that do not speak Dutch, illiterates or people without digital skills. This project did not take into account how these people can participate in the digital neighborhood community, but it would be good to develop ways to include these people.

NWAG's for social cohesion

In this project the focus was on NWAG's that aim to improve safety. It seems that residents are easy to bind on this specific topic because they all care about safety. Most residents do not directly care about creating social bonds with people in the neighborhood, but they find it desirable to have social control in the neighborhood over each other's possessions and the public space. They experience that NWAG's make the social control visible. They also said that the NWAG helps to recognize more people from the neighborhood and who belongs there or not. It seems that indirectly NWAG's do help to improve social cohesion. However, their strength is in uniting many people in the neighborhood around a topic they care about: safety. A research into the contributions of NWAG's to social cohesion might be interesting.

Other DNC platforms instead of NWAG's

The choice in this project was made to focus on NWAG's, because they are used a lot and cover an area that is experienced as direct environment. However, interesting opportunities with other DNC platforms might have been overlooked in this way. Together with mapping current support in wards, the municipality should also map to what degree the three most used platforms are used in the wards (WhatsApp, Nextdoor, Veiligebuurt). If other platforms are really used equally or more than WhatsApp, it would be interesting to look into how the proposed touchpoints can be applied for other platforms.

List of terms

Digital neighborhood community (DNC)	A group of residents from one neighborhood that communicate with each other on a digital platform, for instance Nextdoor, Veiligebuurt or WhatsApp.
Neighborhood WhatsApp Group (NWAG)	A DNC set up via WhatsApp; a WhatsApp group used by neighbors to communicate with each other. Two types exist: the social NWAG where neighbors communicate about any topic, and the alert NWAG, that is used to communicate about safety-related information, or only for alerts regarding safety. The alert NWAG is often coordinated by one or a few members of the group.
Ward WhatsApp Group (WWAG)	A WhatsApp group that consists of all coordinators of NWAG's in a ward, someone from the police and/or someone from the municipality. The purpose of this group is exchange information on the level of a ward between police/municipality and residents.
User journey	A visualization of the phases a user goes through in noticing, starting to use, using and ending the use of a product, service or system.
Touchpoint	A facilitator of an interaction of a user with a service. This facilitator can have any shape, from a physical product to a person. For instance, examples of touchpoints in a banking service that provides payment are a bank card or an application that provides digital payment.

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Contents of appendix

Appendix A Interviews for context research

Appendix B Roles and interests of relevant stake-holder groups
- B.1 Residents
- B.2 Police
- B.3 Municipality

Appendix C Description of all compared DNC platforms

Appendix D Comparison of Nextdoor, Veiligebuurt and WhatsApp as DNC platform

Appendix E Comparison of neighborhood initiatives that improve safety

Appendix F Screener for user research

Appendix G Research design
- G.1 Research design
- G.2 Sensitizing booklet
- G.3 Interview and topics guide
- G.4 Agreement form

Appendix H First impressions for each participant

Appendix I Paraphrasing documents for each participant of the user research

Appendix J Issues and causes table

Appendix K Ideation
- K.1 Part 1: setting scope for ideation
- K.2 Part 2: ideation on how to set up WWAG
- K.3 Part 3: ideas as touchpoints
- K.4 Part 4: touchpoint development

Appendix L Touchpoint cards

Appendix M Selection of touchpoints

Appendix N Touchpoints per evaluation

Appendix O Interview guide and setup
- O.1 Research setup
- O.2 Session guide

Appendix P Poster of user journey phases

Appendix Q Insights per interview

Appendix R Clusters of insights

Appendix S Rating of touchpoints in interviews

Appendix T Personal reflection on project