

Teemu Partanen

**KNOWLEDGE-BASED GOVERNANCE OF
LOCAL SECURITY THROUGH COMMON
SITUATIONAL AWARENESS**

Faculty of Management and Business
Master's Thesis
May 2022

ABSTRACT

Teemu Partanen: Knowledge-based Governance of Local Security Through Common Situational Awareness
Master's Thesis
Tampere University
Master's Programme in Security and Safety Management - Security Governance
May 2022

This research identified the main possibilities and challenges for creating a common situational awareness between the public, private and third sector organisations working around the theme of security in the downtown area of the city of Tampere. Additionally, the research examined what kind of knowledge is collected by different organisations from the security situation of the downtown area.

The research was conducted by using a qualitative approach. The main method for the data collection was expert interviews that were conducted by using a semi-structured theme interview method. These expert interviews were conducted to eight separate organisations from all three sectors addressing the issue of security in the downtown area. All collected data were analysed by using thematic analysis.

The main conclusions of the research were mainly positive. Many of the respondents interpreted the common situational awareness to be both useful and necessary for their individual operations as well as to develop broader security governance and policies of the area. Possibilities also included the available knowledge, which was vast and complementary between organisations. The possessed knowledge included varying security related statistics and detailed human intelligence about current trends and phenomena obtained from the field. Even though some of the knowledge was considered highly confidential, phenomena and statistic levels of knowledge were seen as suitable for mutual sharing. According to the answers, knowledge at the phenomena and statistics levels was also needed by the organisations to make the supply to match the demand. This issue also included some challenges. While many of the expected challenges were debunked throughout the interviews, two were left without answers. Informational network was seen as the most challenging way to implement the concept. Creating a technical system capable to combine all separate independent systems used by different organisations was interpreted to be impossible to be achieved due the expected costs and technical difficulties. Also, the organisational resources to participate in the upkeep of the common situational awareness raised some questions.

At this point, the level or the format of the implementation were not seen as a matter of importance. Most of the participants were eager to participate in any kind of work enhancing mutual co-operation and coordination. However, many participants wished for mutual interpretation of the results, which suggests that the local security network would be the most suitable way to begin. Also, the governance of the chosen implementation method raised some discussions about the leader of the network. According to the results, the leader should be a neutral actor like the City of Tampere itself or a separate network facilitator to encourage participation. However, a completely equal group implementation could include the risk of an unintentional transformation to organisation-led network due to the varying authority levels between the actors. Good pre-planning and listening to the organisational opinions could allow achievable and long-lasting results.

Keywords: Security, Situational Awareness, Intelligence, Knowledge-based Governance

The originality of this thesis has been checked by using the Turnitin OriginalityCheck service.

CONTENTS

1	INTRODUCTION	1
1.1	Background	3
1.1.1	<i>Security situation in the downtown area.....</i>	<i>3</i>
1.1.2	<i>Previous research.....</i>	<i>6</i>
1.2	Research questions and the aim of the research	12
1.3	Central terms and concepts	13
1.4	Disposition	16
2	THEORETICAL FRAMEWORK	18
2.1	Governing security	18
2.1.1	<i>Complexity and wicked problems</i>	<i>18</i>
2.1.2	<i>Networks in governance</i>	<i>21</i>
2.2	Co-operation in security governance.....	24
2.2.1	<i>Crime and deviance as a security issue.....</i>	<i>24</i>
2.2.2	<i>Multisectoral security networks.....</i>	<i>27</i>
2.3	Situational awareness	32
2.3.1	<i>Situational awareness as a process</i>	<i>32</i>
2.3.2	<i>Situational awareness as a product.....</i>	<i>36</i>
3	METHODOLOGY	40
3.1	Methodological choices	40
3.2	Data collection	41
3.2.1	<i>Semi-structured theme interview</i>	<i>42</i>
3.2.2	<i>Interviewees.....</i>	<i>43</i>
3.3	Handling of data and analysis	48
3.4	Reliability and validity of the research.....	51
4	MAIN RESULTS AND CONCLUSIONS OF THE RESEARCH.....	55
4.1	Description of the data	55
4.2	Main results and findings	55
4.2.1	<i>Organisational perceptions of the local security situation.....</i>	<i>56</i>
4.2.2	<i>Current state of organisational intelligence.....</i>	<i>66</i>
4.2.3	<i>Organisational perceptions for the creation of the common situational awareness</i>	<i>75</i>
4.3	Discussion	87
4.3.1	<i>Practical views on the implementation of the common situational awareness.....</i>	<i>87</i>
4.3.2	<i>Enhanced local security governance with the common situational awareness</i>	<i>97</i>
4.3.3	<i>Developing the response to security issues.....</i>	<i>103</i>
4.4	Limitations of the study and suggestions for future research	109
5	SUMMARY OF CONCLUSIONS	113
	REFERENCES	118
	APPENDICES	125
	Appendix 1: English translation of the interview invitation	125
	Appendix 2: English translation of the interview framework.....	126

TABLES

TABLE 1. STATISTICS EXAMPLE ONE FROM A PRIVATE SECURITY COMPANY 72
TABLE 2. STATISTICS EXAMPLE TWO FROM A PRIVATE SECURITY COMPANY 73

FIGURES

FIGURE 1. DISPOSITION 16
FIGURE 2. PROCESS OF THE SITUATIONAL AWARENESS BASED ON ENDSLEY (1995) 33
FIGURE 3. TIMELINESS AND THE FUTURE ORIENTATION OF SITUATIONAL AWARENESS BY THE LEVEL OF USE 35
FIGURE 4. THE INTELLIGENCE CYCLE (RATCLIFFE, 2007A, P. 6) 38
FIGURE 5. THE SIMPLIFIED INTELLIGENCE-LED POLICING MODEL (RATCLIFFE, 2007A, P. 8) 39
FIGURE 6. THEMATIC ANALYSIS PROCESS (TUOMI & SARAJÄRVI, 2018, P.104)..... 50
FIGURE 7. AN EXAMPLE OF RANDOM VISUALISATION CREATED WITH MICROSOFT POWER BI -APPLICATION. 91
FIGURE 8. EXAMPLES OF THE VISUALISATIONS FROM THE POLSTAT-SYSTEM (NATIONAL POLICE BOARD OF FINLAND, 2019, P. 89)..... 92

1 INTRODUCTION

This research is focused on the idea of enhancing local security governance through the implementation of multisectoral common situational awareness. The focus of this research is to identify the key possibilities and challenges in relation to the creation of common situational awareness between the public, private and third sector organisations working around the wicked problem of security in the downtown area of the city of Tampere. This issue is approached by identifying the local level ideas, attitudes, needs and beliefs through interviewing experts from relevant organisations. These results can then be utilised in the creation process of the local level common situational awareness around the concept of security.

The need for improvement around the local security governance of the downtown area of the city of Tampere is clear. A direct citation from a news article released shortly after the results from the safety questionnaire conducted by the city of Tampere during the year of 2021 claimed that “citizens are afraid to walk in the downtown area of the city of Tampere” (Kalliosaari, 2021). This individual news article openly claimed that the downtown area of the city of Tampere is suffering from different security issues such as visible substance abuse and a variety of disorderly conduct (Kalliosaari, 2021). Unfortunately, this ostentatious citation about the fear of the citizens was not completely wrong. According to the safety questionnaire this insecurity, or at least the feeling of it is still a true phenomenon in the downtown area of the city of Tampere (City of Tampere, 2021a; City of Tampere, 2021b).

Security issues, such as crime and deviance, are always complex puzzles to be solved. Almighty facet which could correct the problems and their root causes alone do not exist. The exemplary statement from the Ministry of the Interior (2022) describes that the responsibility of enhancing security belongs to everyone, and it requires systematic co-operation between different facets. This is quite the truth, especially, when the root causes of issues, such as crime and other deviant conduct, vary from individual problems to societal ones (Kivivuori et al., 2018).

At the same time, the traditional upkeep of law and order is constantly migrating from the hands of public authorities under contracted personnel from different private security companies. Just to create an example, according to the Finnsecurity ry (2020), during the year of 2018, the guarding and private security services in Finland employed over 11 000 people and the revenue of the guarding and security field alone was 831 million euros. If all other security related services, such as locksmiths, are included to the statistic the total revenue of overall security industry was over 2,3 billion euros (Finnsecurity ry, 2020). In addition to the permanent employment numbers, the total number of the people with valid licence to operate as a security steward in the nearby year of 2019 was around 48 000 and the number of valid security guard licences was around 17 000 (National Police Board of Finland, 2019, p. 110). Meanwhile, during 2018 the operating budget for the Police of Finland was a bit under 800 million euros and the police employed approximately 7300 officers (Kietäväinen, Oulasvirta & Uusitalo, 2022, p. 13; Clausnitzer, 2021). While the police budget and the staff have both since slightly grown, so has the private security industry (Kietäväinen, Oulasvirta & Uusitalo, 2022, p. 13; Clausnitzer, 2021; Finnsecurity ry, 2020).

According to Statistics Finland (2022a) Tampere has over 244 000 citizens and the whole Tampere Region has the population of over 528 000 people. Acting as the regional centre of the area, the amount of people visiting the city centre is vast even during ordinary business days, not to mention the different events and nightlife, when people gather to the centre from the neighbourhood towns and cities. This increases the stakes and interests for the city of Tampere itself to keep the downtown area as healthy and attractive as possible for the visitors, residents, and businesses in the area.

Fluent co-operation between different facets should be a self-evident must, not just because this complex issue of insecurity touches the responsibilities of so many different facets, but because the resources and possibilities to solve these problems alone are minuscule. Just by briefly assessing the situation one could see that effective respond to the security issues requires truly multifaceted work. The root causes of these issues require co-operation between official control and many of those not so evident security actors, such as social and health services. At the same time while official control is moving more and more into the hands of private security industry, it must also be involved to the equation. Not to forget the city itself which controls most of the

varying operations and development in the area. Still, in relation to the security situation of the downtown area, there is a clear deficiency in systematic information sharing between the public, private and third sector organisations working around the wicked problem of security.

This research addresses the security issues of the downtown area by analysing this irreplaceable need for better co-operation between different organisations working around the issue of security, through the idea of creating a multisectoral common situational awareness. This research identifies the possibilities and challenges for the creation of the common situational awareness between the public, private and third sector organisations in relation to the security situation of the downtown area of the city of Tampere. Through this research the actual capabilities, needs, wants and opinions of the organisations working hands-on around the issue are examined to help creating better co-operation and more efficient response to the complex puzzle of security.

1.1 Background

This subchapter presents the background which led to the recognition of the need for this research. After the presentation of the background this chapter also includes discussion of the previous research to point out that there was a clear research gap requiring this research to be conducted.

1.1.1 Security situation in the downtown area

The security issues in the downtown area of the city of Tampere are a common and re-occurring local topic. Discussions in social media about public intoxication, visible drug trade and general disorderly conduct with co-occurring crimes have been going on for a few years. These issues, for example visible substance abuse and other disorderly conduct, as a major problem in the downtown area are also repeatedly highlighted in the local media (Mäkinen, 2021; Keto-Tokoi, 2021).

Early in 2021 the city of Tampere and Tampere Region Economic Development Agency Business Tampere held a workshop around the theme of security in the downtown area. This workshop included participants from the city of Tampere,

Tampere University, Central Finland Police Department, different social and health organisations, private security companies and a large group of representatives from business life and their advocacy groups. The workshop's results lifted into spotlight some issues regarding the security situation in the downtown area of the city of Tampere. Open substance abuse and visible sales of narcotics, including its side effects like crimes and disorderly conduct, were seen as the main problems in this surrounding, just like in the media. At the same time the lack of visible police patrolling and need for better co-operation and information sharing between different facets were also recognised as something to develop around the subject. (Business Tampere, 2021.)

A short while later in 2021 the city of Tampere published results from the safety questionnaire conducted to the citizens of Tampere. The questionnaire itself handled issues related to the feeling of safety and security from the city of Tampere. While it is important to note that the overall positive results were slightly increased from the previous questionnaire of 2017, these results from the questionnaire of 2021 still confirmed the general discussion which had been going on in different domains: there were a justifiable reason to be somewhat worried about the security or the feeling of security especially in the downtown area. (City of Tampere, 2021a; City of Tampere, 2021b.)

The questionnaire was answered by a total of 3313 citizens, and 368 of them directly represented the downtown area of the city of Tampere. According to these results, 31 % of the downtown respondents claim that violence has increased during the recent years, while the similar result from the whole city was 25 %. In the downtown area 35 % respondents claimed that they have witnessed at least one fight or an assault during the last 12 months, while the percentage for the whole city was 24. When asked about the different property related crimes 63 % of respondents from the whole city responded that their household did not encounter any property related crimes during the previous 12 months in their home municipality. At the same time the amount in the downtown area was only 43 %. Also, 57 % of the respondents in the downtown area claimed to avoid certain locations within kilometre radius from their home due the fear of violence, while the similar percentage from whole city was only 41. (City of Tampere, 2021a; City of Tampere, 2021b.)

When asked about the fear of ending up as a victim of certain crimes during the next 12 months, 70 % of the respondents from the downtown area were at least slightly worried about ending up as a victim of harassment. 48 % of the same respondents were at least slightly worried about ending up as a victim of sexual harassment and 39 % feared at least slightly ending up as a victim of a sexual assault. Similarly, 65 % of the respondents feared violence or the threats of violence, 67 % feared that their property might be vandalised and 71 % feared different thefts. These results were almost identical to the levels of fear from all respondents: the overall results from the downtown area respondents were in some cases just few percent higher. Largest difference was when looked at the respondents who claimed to be very worried about ending up as a victim of a crime during next 12 months. For example, 9 % of the downtown area respondents were very worried about ending up as a victim of a violence or threats of it while the same number from whole city was only 6,6 %. 11 % of the downtown area respondents were very worried that their property might be either vandalised or stolen, while the whole city results were only 8,3 % regarding thefts and 7,2 % regarding vandalism. (City of Tampere, 2021a; City of Tampere, 2021b.)

While the general results were somewhat worrying, they still showed slight improvement to the same questionnaire conducted during 2017. Contrary to these, the most noticeable change was when the respondents were asked about how large issues certain problems are in their own neighbourhood. All positive results from the downtown area respondents claiming that a certain issue was not at all a problem in their neighbourhood were decreased compared to the previous questionnaire of 2017. These results also had the biggest difference compared to the statistics from whole city. For example, drug use and sales were seen as a major issue by 30 % of the respondents from downtown area while the same number from whole city was only 17,5 %. Similarly, intoxicated people and disorderly conduct were seen as a major issue by 21 % of the downtown respondents while same percentage from whole city was 11,7 %. Also, uncleanliness of their living environment was seen as a major issue by 20 % of the respondents from downtown area while the percentage from overall respondents was 12,7. (City of Tampere, 2021a; City of Tampere, 2021b.)

At the same time, the city-wide statistics from national authorities show positive movement just like the overall results of the safety questionnaire compared to the

previous one. For example, the wastewater analysis on drug use conducted on regular basis by the Finnish institute for health and welfare (2022) showed signs of reduction of overall drug use in the city of Tampere during 2021. Also, the national statistics in the offenses reported to authorities in the Tampere area sub-regional unit during 2021 showed a noticeable decrease from the previous year (Statistics Finland, 2022b).

The contradictions to the city-wide statistics compared to the discussions and especially the results from the safety questionnaire from the downtown area made the need for better co-operation between organisations working around the issue to stand out. The city of Tampere recognised that to understand more thoroughly what the actual situation in the centre of the city is, a more local and fluent information sharing must be conducted between different organisations. This idea for the concept of common situational awareness and the need to survey the true possibilities for this was found in co-operation with the director of risk management and security of the city of Tampere.

At the moment there is no security related common situational awareness work which includes all the three sectors operating around the downtown area's security situation. Creating this kind of common situational awareness could create more reliable local information about the security situation to all participants. The contradictions between city-wide statistics and local experiences also raise a question if the local situational awareness work requires different information compared to what is available now. While the overall situation might be slightly improving, the problems could at least seemingly concentrate on the downtown areas of large cities making them a specific location that might require separate assessment.

1.1.2 Previous research

There is a lot of research around the theme of this paper. Co-operation in the field of security governance, situational awareness and other information sharing has been the topic of many research papers, master's dissertations, and other research projects.

One relevant research related to this subject is Virta's (2013) assessment on local security governance by evaluating the Finnish urban safety and security strategies from 2002 to 2012. One of the major findings from this evaluation was that there is a clear

transition in the urban security governance from Scandinavian model to European model, meaning the shift to include more issues originating from the external sources like terrorism instead of “traditional risks”. What was also important in relation to this research was that networked governance of local security was seen to have issues such as the lack of performance management or evaluation of the actual achievements. Also, especially the operational level co-operation was seen to be often based on projects and to lack continuity. In general, Virta also claimed that urban security was still very much managed in silos. (Virta, 2013.)

To understand more about the challenges of this co-operation in the field of security governance, international research has in many cases focused on the relationships angle of the security networks and collaboration. Goris (2001) address community crime prevention networks through the role and relationship between police and welfare actors. In this research the varying power levels between the weaker and the stronger actor might cause the goals of the whole co-operation to change into the goals of the most powerful actor causing varying negative effects to the overall situation. In this sense, he claimed that while co-operating, different actors must have the possibility to keep their own individual goals, even if those goals are conflicting in some perspective. This acceptance of varying goals is claimed to lead into a model of co-operation where different participants hinder each other as less as possible, and it would also create a way for truly effective versatile crime prevention work through those networks. (Goris, 2001.) Skinns (2006) also studied the hierarchical side of crime prevention and community safety networks of England and Wales. She also found out that usually there are different level participants varying from those who manage and steer the network to those who are more lower lever participants doing what is told. This variety could cause difficulties for the network to truly gain a team-like approach to crime prevention and some cases this could be used by some actors to pursue their own ideas and mute others. She suggests similar ideas to Goris, that these networks should allow the team-like work without making others bend or lose their own goals. (Skinns, 2006.)

Varying power structures are not the only target of research around security networks. Whelan (2016) approached the structure and efficiency of these networks by researching Australian national security networks through the concept of networked security management. He found out that the security networks have some unique

challenges compared to the ordinary management networks, mostly originating from the special characteristics of security actors. His findings were also used as a framework in this research. (Whelan, 2016.)

In addition to the lack of goals, varying authority levels and challenges revolving from the shadowy concept of security, there are other issues. Crawford's study on crime prevention and community safety partnerships in England shows how British Community Safety Partnerships have mostly failed due to the lack of mutual trust and reciprocity. Also, state's direction and command were seen as a cause of the lack of necessary local perspective in the decision-making abilities. These networks also lacked the inclusion of necessary local partners into the networks, presenting in many ways similar challenges than the previous examples of the research. (Crawford, 2006.)

Likewise, Shepherdson, Clancey, Lee and Crofts (2014) studied the networked local security governance in Australia through role of Community Safety Officers. The main conclusions from this research were that the sifting transition of the role in crime prevention from the state government to local level creates confrontations in the issues of responsibility of crime prevention costs and management. Most notifying recognised problem was the same as in Crawford's example: better communication and negotiation between local level and state level actors were seen as a necessity. This way the local preventative policies are not dictated from state level, but more negotiated together with the community level actors for them to truly address the community level issues. (Shepherdson, 2014.)

These challenges and critique were approached differently when Harking (2018) analysed the variety of critique presented against community safety partnerships. His article discussed about the usability of community safety partnerships involving local community representation and police in Northern Ireland and Scotland. This research claimed that for the network to be efficient, its goals must be chosen purposefully so that they can be addressed with shared responsibility by the participants of the network. If the issues brought to the table are for example issues that are handled unilaterally by just one of the members, it will eventually make the network unnecessary and inefficient resulting in failures. (Harking, 2018.)

While the concepts of networked security management and different local level solutions are a widely researched matter, this research does not answer to the research questions of this research. However, this previous international research creates a good foundation to guide this research process in a right direction and to allow the discussion how these issues are presented in the scope of this research.

Situational awareness is also a familiar concept in varying international research. For example, Endsley's (1995) and Dominguez' (1994) papers around the concept and structure of situational awareness are still up-to-date presentations about the background and structure of situational awareness. These presentations focus especially to the concept and the creation of situational awareness in general and are as such used as a framework in this research.

The concept of a common situational awareness has also been researched before. For example, Seppänen, Mäkelä, Luokkala and Virrantaus (2013) describes the development process of shared situational awareness for emergency management. This research focused on the issue of communication and information sharing. Especially the need to recognise critical information required for operations and to make human agents to understand the importance of co-operative roles was emphasised as an important finding to enable usable common situational awareness. (Seppänen et al. 2013.) Later research by Seppänen and Virrantaus (2015) focused on the information used to create this common situational awareness in similar surrounding of emergency management. This research created framework to recognise information and quality gaps and as such emphasised the role of good quality information in the creation of a common situational awareness. (Seppänen & Virrantaus, 2015.) These basic findings are relevant in the creation of any other type of a common situational awareness.

These themes have also previously been researched in other master's dissertations. Immonen (2016) focused on co-operation between authorities in relation to environmental crimes. She found out that better co-operation is required especially while the resources of authorities seem to be more and more scarce. In addition, sharing information to solve specific issues, like environmental crime, was seen as a necessity between authorities (Immonen, 2016). Lepola-Lång (2020) addressed the concept of leadership in changing security environment and found out that especially in the Finnish

comprehensive security model effective co-operation between various facets, for example through networks, enhances the security leadership in complex surroundings. Perttula (2016) studied the co-operation focusing his point between the public and third sectors organisations and ended up in mostly positive results in a sense that this co-operation would mostly benefit all. This dissertation raised some questions whether the benefits of better co-operation are truly acknowledged by participants focusing this question mainly to the police. He also discussed about the problems related to the issue of co-operation when it is based mostly in personal relationships instead of vacancy related permanent work tasks. (Perttula, 2016.) As early as in 2006, Aho (2006) researched co-operation between the police and private security industry and found out that this co-operation with the private security industry and other facets could include a lot of hidden benefits and possibilities. One of the closest dissertations to this was done by Turunen (2019), who approached the co-operation in security governance through the same theme of a common situational awareness. While this dissertation found out that there are true needs and possibilities for it, it was focused on regional level and discussed mainly about the situational awareness between authorities and other regional level actors (Turunen, 2019).

These dissertations and many others are focused on the same theme of improving co-operation in the field of security governance. Some of them even focused directly on the concept of a common situational awareness. What is important to notice is that all these dissertations emphasise that information sharing is a key to enhance the efficiency of security governance and most importantly, the end results of the work.

There are also other research projects and publications that have noticed the need for better co-operation and improved situational awareness. Prime Minister's Office's publication about the situational picture of security in the municipal service production and municipal councils highlighted that even though the general situation especially regarding the municipal councils was deemed good, there is still a need for better situational awareness work in the municipalities' security management, especially when creating threat analysis and risk assessments. This report also emphasised the need for more integrated situational awareness work. (Kinnunen, Liljeroos-Cork, Virta, 2021.) Also, a recent government report on internal security mentioned that to prevent security problems a broad cross institutional co-operation is required. Especially the public

sector organisations and the third sector were mentioned as important partners in this co-operation focusing on local and regional security work. It also emphasised the need to include the wellbeing service counties into the equation. (Ministry of the Interior (2021.)

One of the most significant publications in relation to this research is the state of regional security -model (ATT model). ATT model creates a path to form knowledge-based regional security governance through common situational awareness. This publication is an excellent guide to improve regional situational awareness work and knowledge-based security governance. It gives a good basic structure of how information is collected and how the enhanced knowledge-based governance could be created. One of the most usable individual parts of this publication are the precise lists of different information registers which could be used as sources of information in regional security governance. These are also categorised in different themes, so it is easy to recognise what source is suitable for certain theme of safety or security. This publication also emphasised the need to reduce authority-oriented work to include the private and the third sector into the process, and it is even mentioned that these facets could have hidden information relevant especially in the first stages of the model. (Molarius et al., 2020.)

There are a lot of current objectives to increase co-operation in the field of governance. While these dissertations and previous publications suggest that co-operation and improved situational awareness would enhance security governance, the research also suggest that it is not a challenge-free process. The ATT model is one clear example of how this kind of idea of the common situational awareness discussed also in this research could not only improve security governance, but it could make the decision-making more accurate. Still these papers miss more on-hand perspective about the issue on local level. This research focuses on that research gap and identifies the actual needs and opinions of those organisations that should co-operate to raise an understanding of the possibilities and challenges of common situational awareness work and co-operation emphasised everywhere. This research also focuses on issues on local level to find out what is the information required to be available to tackle issues in smaller surroundings compared to the regional or state level. This research also combines all three sectors and tries to find out what is this good information what for example the private sector or the

third sector has, which is mentioned in many of the previous research but not specifically explained. The overall benefits of this kind of work are proven in almost every research. The main need for this research was recognised to answer to the research gap of how this issue is seen by the actors themselves on very local level. Also, the possibilities experienced by the actors themselves are addressed in addition to the issues preventing the co-operation even though the benefits are proven and emphasised.

1.2 Research questions and the aim of the research

The aim of this research was to understand what the realistic possibilities for the development of local security governance through the common situational awareness between the private organisations, the third sector and the public authorities in the city of Tampere are. This research assignment focused on knowledge-based local security governance through the theme of common situational awareness at local level.

The goal of this research was to analyse underlying possibilities from, and for, the creation of common situational awareness between different stakeholders involved in the security work around the downtown area of the city of Tampere. In addition, this research investigated what kind of challenges there might be hindering the creation of common situational awareness, and to find out if the creation of common situational awareness is at all a realistic possibility, even though the benefits of it are proven in various research.

This research answered to the following research questions:

- 1. What kind of possibilities and challenges would be included in the creation of common situational awareness between the public, private and third sector regarding the security situation in the downtown area of the city of Tampere?*
- 2. What kind of information about the security situation is collected by different organisations operating around the issue of security in the downtown area of the City of Tampere?*

These questions required to approach this theme comprehensively. The questions were approached through the theme of understanding of the concept of security and the situation in the downtown area, proceeding to more specific issues relating the

collection and utilisation of information and information sharing all the way to the wants and beliefs related to the topic. To answer to these questions through actual perspectives from the participants, direct interviews were conducted to experts working in the organisations addressing the security situation in the downtown area.

In addition, a very brief review was conducted in relation to the research question two. Different incident statistics received from certain participant organisations were assessed. This analysis was focused to understand more about the data these organisations collect and to compare these to the requirements of situational awareness.

1.3 Central terms and concepts

This research circles around the themes of *security*, *intelligence*, and *situational awareness*. Some of these concepts include a lot of complexities, so it is important to understand what the interpretations of the main concepts in this research are.

There is a lot of discussion around the varying concept of *security* and the issue becomes more difficult when the separate concept of safety is included into the equation. Aven (2014, p. 17) mentions that it is common to do this separation of the concepts of safety and security. He mentions that while safety could be described of being safe from accidents, security as a term could be used to address intentional situations such as crimes (Aven, 2014, p. 17).

While this research follows the previous basic separation and focuses on the conceptualisation of security, the discussion does not end there. This can be seen in the description by Virta (2019, p. 470), where security is depicted more in depth as a state of being secure and free from fear, danger, risks, poverty, anxiety, and others seemingly negative issues. According to Zedner (2009, pp. 14–19) this state of being can be divided into objective and subjective states. In short, the objective state is the absolute state of being free or protected from threats which of course is then completely dependent on the definition of the threat itself. The subjective security as such leans more towards individuals' personal opinions and interpretations which might be anything the subject chooses to believe in, even though the rational explanation to this would differ. (Zedner, 2009, pp. 14–19.)

In addition to the difficult balancing between the state of being, security can be a double-edged sword also in more easily approachable level. Valverde (2010, p. 4) gives an example of this explaining that different security measures can at the same time create new insecurities. Storing materials on computer instead of paper removes some security issues related to the papers but creates a variety of new ones. And of course, to make this issue more complex, the concept of security can nowadays be used in almost anything from concepts of food security to computer security and so on. (Valverde, 2010, p. 4.)

A good conclusion by Juntunen and Virta (2019, p. 71) summarises, that security can be a fundamentally wicked problem with no complete solution. While this discussion shows that the concept itself contains many complexities, in this research the concept of security acts as an explanatory concept limiting the scope of this study into the area of intentional human actions such as crimes and deviance. The security concept in this research should not be seen just as a blunt tool of control and different concrete security measures to keep the deviants away from common folk and their businesses. Rather, it is a concept also requiring the reduction of those root causes causing crime and deviance instead of just pure law and order.

More easily approachable term is *situational awareness*. Even when it is used in many different fields, the basic concept and foundations of situational awareness are very similar in separate discussions. For example, Dominguez (1994, p. 11) discusses about situational awareness in aviation through the idea of what situational awareness is for a pilot of a plane. It is described as a process and as a product which includes extraction of information, integration of this information to previous knowledge to form a coherent mental picture, and the use of this picture to direct further perception and anticipation of future events (Dominguez, 1994, p. 11). In the creation of her own interpretation of situational awareness Dominguez (1994, p. 6) refers to Morishige and Retelle (1985, p. 92) who describe situational awareness as an awareness of conditions and threats in the immediate surrounding. Dominguez (1994, p. 6) also refers to Endsley (1990, pp. 1–3) who describes situational awareness as a perception of the elements in the environment within a volume of time and space, the comprehension of the meaning of those, and the projection of their status in the near future. These examples also explain situational awareness very well regarding the theme at hand.

Situational awareness is also a familiar concept in military and in cyber security fields. Alberts, Garstka, Hayes and Signori (2001, pp. 120–121) describe situational awareness through an example of a combat situation where the situational awareness is an awareness of the situation that exists in the whole battlefield or in some specific part of it. Sometimes this situational awareness is described to include the interest to know the future development of the situation or insight information of it (Alberts et al., 2001, pp. 120–121). In cyber security situational awareness is a similar process of clear understanding about what is going on in the system so that this clear knowledge can then be utilised to aid the decision-making process. (Sun, Dai, Singhal & Liu, 2017, pp. 66–67.) Overall, throughout the different fields, concept of situational awareness stays very concordant.

Through these discussions the situational awareness could be understood as a process and as a product. In this research the concept of situational awareness follows the previous discussion: situational awareness includes gathering information, using this information to create a picture of the current situation, and utilising this in the decision-making and anticipation of future events.

To understand why this research moves to discuss about *intelligence* in relation to the situational awareness, instead of information, the concept of intelligence must be addressed. In mundane discussion intelligence could sound as something conducted by secret state agencies and militaries. This shadowy interpretation is shared even by some discussing about the issue. For example, Warner (2002, p. 10) wrote that “intelligence is secret state activity to understand or influence foreign entities”. But could this interpretation be too strict and misleading? It might be, at least according to Wheaton and Beerbower (2006, pp. 326). They describe intelligence as “a process, focused externally and using information from all available sources, that is designed to reduce the level of uncertainty for a decisionmaker” (Wheaton & Beerbower, 2006, p. 329).

Many others agree that intelligence is far more than just secret state activity. Crump (2015, p. 5) approaches the issue through more practical view while discussing about corporate security intelligence. He separates the two similar concepts of information and intelligence. He claims that information and intelligence are separate concepts but only in the level of information being raw data, which contains everything without context,

and intelligence is seen as considered and refined version of information creating insights (Crump, 2015, p. 5). This idea of intelligence is supported by earlier statement by Grieve (2004, p. 25), where intelligence is describes as “information designed for action”. Watson (2007, pp. 107–112) follows this same ideology discussing that information can exist independently without analysis, and it can be related to the subject or not. While on the other hand, intelligence is told to be a specific and applicable part of the information which can be utilised in different problems and situations. (Watson, 2007, pp. 107–112.)

Watson (2007, pp. 107–108) paints a very approachable interpretation of intelligence, where it is described as everyday occurrence affecting every one of us and every single organisation. Everyone is mentioned to utilise intelligence, just at different levels. Just by asking recommendations for a good restaurant from a friend is human intelligence: you are seeking desired pre-analysed information from your contact to use it in your own decision-making. (Watson, 2007, pp. 107–112.) This idea of intelligence as a specific piece of information designed for action is far more tedious than the shadowy concepts including spies, and it is used as an approach to intelligence in this research as well.

1.4 Disposition

The disposition of this research followed the general master’s thesis instructions by Tampere University. Only few subtopics were changed or combined in this report to make it more fluent for the reader. How this thesis is divided into five main segments is presented in the Figure 1.

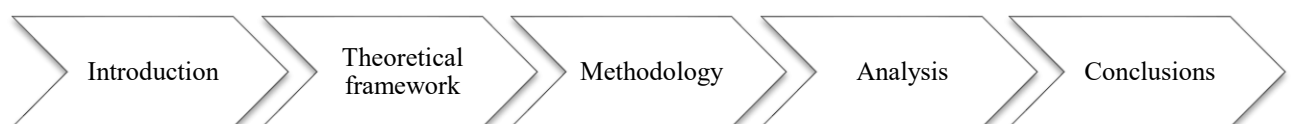


FIGURE 1. Disposition

The introduction is followed by the theoretical framework, which contains the discussion and presentation of relevant issues. These include the discussion about complexity theory, wicked problems, networked governance, co-operation in security governance through networking and justifying the need for multisectoral co-operation through brief criminological discussion about the issues of security. Situational awareness is also addressed through its two forms: a process and a product.

The third segment, called “Methodology”, contains argumentation for the use of qualitative research methodology. Main data collection method of semi-structured theme interview and the challenges related to the status of expert interviewees are also addressed. In addition, the end of this segment includes a presentation of thematic analysis methods and the discussion of the reliability and validity of this research.

The fourth segment introduces the main results from the research itself. The collected data is briefly explained and after that, the main results and findings are presented as such. This segment also includes discussion of the results and of course the limitations of this study with suggestions for future research and other recommendations.

The fifth complete segment contains a summary of conclusions of this research presenting for example a conclusion of the answers for the research questions. After the fifth segment, at the appendices section, are the main materials relevant or used in this research process. These include the research invite sent to the interviewees and the framework for the semi-structured theme interview used during interviews.

2 THEORETICAL FRAMEWORK

This chapter contains the theoretical framework which guided the research process and was used to analyse the findings. This chapter is divided into the themes of security governance, co-operation, and situational awareness. The first segment contains the theoretical discussion around complex systems, wicked problems, and governance networks in administration. The second segment discusses what the root causes of security issues at hand are, and how they can be addressed. It also contains the discussion about this type of network-based information sharing between varying security actors and other facets. Last segment contains the discussion of situational awareness in this concept. It is presented as a process and as a product through discussions from intelligence studies, intelligence-led policing, and knowledge-based governance.

2.1 Governing security

This subchapter presents the theoretical background of this this research. First, the complexity and wicked problems in governance are briefly presented through theory and conceptualisations. After that, networked governance is discussed as one suitable approach to wicked problems in relation to the theme of the research.

2.1.1 Complexity and wicked problems

Klijn (2008, p. 300) explains how complexity is a relevant concept when addressing the governance processes and government. Originating from the field of natural sciences and biology, the complexity theory is actually a collection of varying theories of complex adaptive systems, dissipative structures, autopoiesis theory, chaos theory and increasing returns and path dependency in economics. What combines these is that in each the system is more than a sum of its parts and any development in the systems originates from the interaction of these parts. Systems are seen developing non-linearly and these systems are subject to multiple different feedback mechanisms. In short, this means that those systems containing multiple independent characters can act in an unpredictable way and they can include complex dynamics. (Klijn, 2008, pp. 300–302.)

As explained, a complex system contains multiple different parts or interacting entities. In the complex system each of these parts operate in their own local surrounding and their operations are based on their own rules, laws, or forces. However, when these parts operate in their seemingly own surroundings based on their own background factors, their actions can have an effect on the overall system. This means that the actions of these individual parts can cause different emerging patterns or phenomena in the whole system. (Maguire & McKelvey, 1999, p. 26.) Peters (2017, p. 386) adds, that these complex systems can also be open, meaning that varying external influences can have an effect to the system in addition to its own parts.

A complex system can exist even if the individual parts themselves are not complex and are operating for example based on unchanging rules. Complex systems have a kind of second level, where even the parts of the complex system itself are all individual complex systems which are governed by evolving rules, making the whole system even more complicated. (Maguire & McKelvey, 1999, p. 27.) This kind of a more complicated complex system is referred as a complex adaptive system. In complex adaptive systems the number of individual parts is usually high, and these individual parts are referred as agents. These agents interact and while they interact they adapt or learn based on those interactions. (Holland, 2006, p. 1.)

It is easy to see why the complexity approach is relevant to the topic of this research. Overall security situation in the downtown area of the city of Tampere can be understood as a complex adaptive system effected by multitude of individual agents and external factors causing different effects or phenomena on the situation. This contextualisation of the complex systems is especially beneficial when addressing wicked problems, such as the issue of security in this research (Klijn, 2008, p. 314). The concept of wicked problem itself originates from planning theory. Wicked problems in general can be presented as problems which does not have any ultimate solution. These problems can be at best, solved over and over again, but never completely in an existential way. (Rittel & Webber, 1973, p. 160.)

Rittel and Webber (1973, pp. 161–167) created a 10-piece framework to identify wicked problems. First, “*there is no definitive formulation of a wicked problem*”. Meaning that in the wicked problems all the information required to understand and solve the problem

are not available. Secondly, *“wicked problems have no stopping rule”*. This means that the wicked problems do not existentially become solved but the actor trying to address these wicked problems stops its actions based on own individual external reason, such as to the decision that the current situation is the best possible outcome at the moment. Thirdly, *“solutions to wicked problems are not true-or-false, but good-or-bad”*. In the theme of wicked problems there is no way to find a true answer to the problem, but instead the parties involved sees the proposed actions in a way of them being either better or worse based on for example their own values or interests. The fourth rule is that *“there is no immediate and no ultimate test of a solution to a wicked problem”*. A solution applied to wicked problem can cause consequences which are not possible to be tested like in ordinary problems. These consequences can happen in an unbounded period of time and to participants which are not even addressing the issue. The fifth rule is that *“every solution to a wicked problem is a one-shot operation; because there is no opportunity to learn by trial-and-error, every attempt counts significantly”*. In short, the solutions implemented on the wicked problems always leaves traces which are irreversible, like for example the influence on people’s lives. The sixth rule is that *“wicked problems do not have an enumerable set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan”*. The idea of this rule is that when dealing with the wicked problems, one could say that anything goes, meaning that there are no solutions which are not possible to be tried on the problem. The actual implementation is of course dependant on the trust and credibility of the planner, and not all ideas will be executed even if they could be. The seventh rule states that *“every wicked problem is essentially unique”*. Even similar problems are unique for example based on the context and the surrounding the issue is presented. The rule eight dictates that *“every wicked problem can be considered to be a symptom of another problem”*. Wicked problems, like crime for example, are always symptoms from other problems such as moral decay or poverty, which in the other hand can also be symptoms from other problems. Next to last rule says that *“the existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem’s resolution”*. This means that there are always multiple ways to address the wicked problems but neither of those ways are right or wrong. Usually, those addressing the wicked problem chose an approach which is the most plausible for themselves. The last rule is that *“the planner has no right to be wrong”*. In this sense, the planners dealing with the wicked problems

are liable for the consequences which results from their actions which can in some cases have a huge and permanent impacts, like the changes on people's lives. (Rittel & Webber, 1973, pp. 161–167.)

The previous characterisation strengthens the claim by Juntunen and Virta (2019, p. 71) who states that security is a one example of these wicked problems. Security, crime, and deviance as such are wicked problems without permanent solutions. The previous contextualisation of complexity approach fortifies the idea that to be able to efficiently address these kinds of wicked problems, a common situational awareness from this system is one way to understand how varying agents affects the overall system and how the wicked problem reacts to different changes.

2.1.2 Networks in governance

In the administrative sciences networks are seen as an important way to create efficient mutual co-operation around complex issues effecting multiple facets. Keast (2014, pp. 22–23) mentions that the governance network theory explains the networks as a new form of governance appearing in an environment where the actors are dependent on each other and where a more horizontal governance is required instead of traditional hierarchical rule. In this sense networks are seen as a patterns of relationships connecting varying independent actors working around different policy issues or programmes. This idea of the governance networks allows addressing these policy issues or programmes in a multidimensional way with a room for local flexibility. (Keast, 2014, pp. 22–23.)

Networks in general are essential form of a multi-organisational governance. Networking around governance has a lot of advantages. Networked coordination is claimed to increase learning, allow better and coherent use of resources, increase competitiveness, create enhanced results in form of improved services and products, and lastly, networks allow enhanced possibility to address complex and wicked problems. (Provan & Kenis, 2007, p. 229.)

O'Toole's (1997, pp. 46–47) article on networks in public administration emphasised the role of networking especially around these previously mentioned wicked problems.

Networks are seen as an easier way to address different complex situations and wicked problems, typically dealt with in public administration. Different policies pursuing ambitious goals or addressing the wicked problems were seen to require networking, especially when they usually have a widespread influence outside the scope of one individual organisation, legislative area, or policy field. (O'Toole, 1997, pp. 46–47.)

These wicked problems as a concept cannot be existentially solved (Rittel & Webber, 1973, p. 160). However, this co-operation makes the work around those problems more efficient. Co-operation between agents can improve the understanding of the wicked problems which improves the possibilities to address the issues efficiently. A working co-operative network increases the possibilities to find out the nature of the wicked problems and their underlying root causes. A good co-operation is also claimed to improve the possibilities to find out provisional solutions to the problems through better insight, and enhancing the possibility for different agents to reach mutual agreement on the matter. Co-operation also facilitates the implementation of the solutions, meaning that while the approaches are mutually agreed on, they can also be coordinated together, contributions can be shared, and general flexibility is improved while continuous mutual adjustment is possible. (Head & Alford, 2015, pp. 724–726.)

In addition to their benefits around the wicked problems, these governance networks can also be seen as a method to increase the democracy in decision-making. This idea is based on the matter that governance networks provide frameworks for the policy making. These frameworks enhance non-hierarchical joint action of the actors which are operationally independent, and which usually have varying views and interests between each other. However, even though these actors are different in many ways, these governance networks join them together because they are somehow interdependent around the shared issue. This networking encourages them to find out common goals and enhance joint actions. While there are a variety of criticism related to this view, and by some, governance networks are even seen as a threat to democracy, these networks in their ideal construction can create a platform for enhanced democratic decision-making allowing a variety of different views to be shared and discussed on the matter at hand. (Sørensen, 2014, pp. 68–80.)

Even though networks are a form of an antihierarchical governance, they do require some level of internal governance. Especially, if the network is goal-oriented this internal governance ensures that all participants are involved in mutually supportive action, and that the issue at hand is addressed properly. It also ensures that the resource use is efficient and effective. The governance in networks can be divided into three forms. *Participant-governed networks* are the simplest and the most common form, where decisions and management of the activities of the network are conducted by the members themselves in an equal way for example through regular meetings. *A lead organisation-governed network* is exactly that: one lead organisation acts as a decision maker of the entire network. This lead organisation then provides all administration to the network and acts as a key decision maker in all network activities. This lead organisation can be appointed by the funder of the network or even chosen by the members of the network themselves at some point. Third method of network governance is *a network administrative organisation*. This network administrative organisation governs the network, coordinates all actions and maintains the network. In this model the network administrative organisation is not one of the members of the network, but it is an independent specifically created facet which governs the network. It can be established by the members of the network or by the facet launching the network. In some cases, this administrative organisation can even be an individual person, usually referred as a network facilitator. Each of these methods have their own benefits and challenges. (Provan & Kenis, 2007, pp. 213, 234–247.)

While this discussion focused on the networking, it is very relevant to the concept of the situational awareness as well. In its base foundation the previous discussion presents networks as a tool to share information and improve general governance in order to tackle varying complex and wicked problems with better efficiency. The common situational awareness can be understood as a similar concept allowing many of the same benefits as presented during this chapter. In addition to this, as a concept the common situational awareness can be created in networks, but the creation process and the use of the common situational awareness also requires at least some level of networking making these concepts interlace.

2.2 Co-operation in security governance

As discussed, security can be seen as a fundamentally wicked problem (Juntunen & Virta, 2019, p. 71). Issues as complex and diverse as this requires co-operation between different actors working around them. This subchapter includes a brief review through criminological theories to the backgrounds and possible prevention methods of the crime and deviance as a security issue. This is used to understand why co-operation in this field is especially important, and what are the facets which are relevant to the theme. Also, the requirements and specific challenges of the co-operation in the field of security are assessed through the theme of networked governance of security.

2.2.1 Crime and deviance as a security issue

Like Aven (2014, p. 17) described, the security issues addressed in this research are limited to the intentional actions like crimes and deviance. The concept of security as a state of being can be divided into two states which are objective, and subjective, state of security (Zedner, 2009, pp. 14–19). These states were discussed during the introduction chapter, but to turn them around, these two states could be understood through their opposites. Those are a more rational state of insecurity where the issues are somehow justifiable and fact-based like measurable incidents of crimes. The other example could be seen more as a personal feeling of insecurity which could be influenced by different subjective matters and even personal opinions without any reasoning.

When discussing about the actual objective issues such as measurable crime and deviance and the subjective feelings of security, it must be understood that those are basically symptoms originating from complex root causes. Regarding the crime and deviance, Kivivuori et al. (2018) presents a variety of criminological theories explaining the causes for a criminal or deviant behaviour. According to these theories, crime can be caused by many issues varying from damaging childhood experiences to childhood upbringing, social relationships, different personal experiences and life events. In addition to the root causes behind the individual falling to act deviant, there are also environmental issues enhancing the criminal and deviant behaviour and even a multitude of societal issues causing it, varying from unemployment to different kinds of societal exclusion. (Kivivuori et al., 2018.)

While the reasons for crime and deviance differs, methods of the crime prevention must also target these varying root causes to be effective. According to Lab (2015) crime prevention can be divided into three levels. The first is the primary prevention, which focuses on removing or mitigating different criminogenic aspects of society. The secondary prevention focuses on individuals, places, and situations with high probability for crime or deviance, through different intervention methods. And the third level is the tertiary prevention which focuses on offenders and tries to eliminate crime renewal. (Lab, 2015, pp. 51, 191, 297.)

Lab (2015) discusses about varying specific crime prevention methods falling under these three levels. To mention a few, crime can be prevented for example through the environmental design which falls under the primary prevention. This focuses on planning the environment in a way which is seen to reduce crime opportunities, such as improved lightning schemes. The environmental design can also include aspects such as increasing possibilities for natural surveillance through keeping areas open and visible. Cleaning and upkeep of a well-maintained look of the area can also prevent crime by creating an image of a community which cares and acts if needed. (Lab, 2015, pp. 53–82.)

A situational crime prevention also seeks to reduce crime by intervening to the crime opportunities. Some of the actions are quite like in the environmental design, such as increasing informal surveillance through lightning and for example opening a walking route in otherwise twilight area. The biggest difference is that this method belongs to the secondary prevention and is targeted against a specific problem, place, time, or even persons. The situational crime prevention methods contain variety of different actions from environmental changes to formal supervision by police or security, reducing rewards from crimes by removing graffiti quickly or increasing the difficulty of crime with traditional physical security measures. (Lab, 2015, pp. 215–235.)

The secondary prevention methods might also tackle some specific issue seemed to increase crime such as drugs and other substance abuse. While the previous methods included more traditional security measures these kinds of complex issues are handled not only with the official control methods implemented by the law enforcement, such as the infamous concept of the war on drugs. Other, but maybe more effective softer means

could include for example increasing the treatment possibilities for the addicts for substance related problems, and of course for the reasons causing or being caused by substance abuse, such as mental disorders. Addressing these complex issues such as drug use also includes varying methods for trying to prevent the substance abuse through for example education and sharing knowledge about the risks of drug use. (Lab, 2015, pp. 255–274.)

In general, traditional crime prevention methods vary from actual physical changes to different security measures such as official or unofficial control (Lab, 2015). At the same time efficient crime prevention can be conducted for example in schools and through other involvement in youths' lives, by supporting families in upbringing, or enhancing good employment policies of the whole population (Gottfredson, Wilson & Najaka, 2002; Bushway & Reuter, 2002; Farrington & Welsh, 2002). In relation to the complexity of the crime and the crime prevention, Sherman et al. (2002, pp. 3–4) mentions very well, that in relation to the crime prevention one should always consider the suitability of the crime prevention methods, because the actual effect varies from person to person.

In addition to the variety of reasons and the methods of crime prevention, one important and widely argued issue in crime prevention is the displacement and diffusion. Eck (2002, pp. 279–284) argues, that for example in relation to the use of situational crime prevention methods in certain crime hotspots, those methods are seen to reduce the overall crime instead of moving it somewhere else from this certain hotspot. But there is also a lot of research which shows signs of displacement and diffusion, and it is mentioned to be a completely plausible possibility that at least some of the crime remains and moves away when certain preventive measures are used. This makes the issue more complex, especially in relation to the true amount of diffusion and displacement and as such, important theme to consider while planning crime prevention methods. (Lab, 2015, p. 133.) While this is somewhat controversial issue, it emphasises the role of good information sharing and situational awareness around crime prevention work to know how the crime responds to the methods used.

Concrete and measurable factors relating to the security are not the whole picture. The feeling of insecurity is caused by fear which might act completely independent from the

actual crime events and justifiable reasons to be scared. For example, physical design and neighbourhood crime prevention programs affects the level of fear of crime for individuals by creating a feeling of security. Same goes with the media. Different media outlets are said to do a lot of reporting about crimes. Broad amount of research proves that a large amount of media coverage related to crimes increases the fear amongst people. This fear could be enhanced especially when the media might sometimes distort the picture by overemphasising crime levels or failing to provide complete information about certain issues. While the media can increase the fear of people it can also mould people's behaviour. It is even claimed that the mass media could influence the images about crime in the eyes of the general population in both ways: positive and negative. Realistic coverage on crimes could even allow people to adopt necessary crime prevention techniques. (Lab, 2015, pp. 135, 137–141.)

Without discussing about the effects of certain approaches to the crime or going any deeper into the certain causes of crime, this previous discussion suggests that the issue of crime and deviance create a complex puzzle which contains a multitude of reasons to cause it and a broad variety of different methods used to deal with it. This interpretation paints a clear picture of a complex issue which cannot be addressed efficiently in a silo. Crime and deviance as a security problem requires broad co-operation between different traditional and untraditional security actors. To enhance security and the feeling of it in relation to crimes and deviance, one needs to consider the motives for crime and deviance, help the individuals so they do not fall to commit crimes and act deviant, analyse the physical surroundings, and implement necessary changes to those, conduct traditional security work and at the same time consider about the communication side of the whole theme in order to have a true effect on both, the objective and the subjective side of security.

2.2.2 Multisectoral security networks

Sydänmaanlakka (2015, chapter 6.5) paints an ideal picture of a global network society, where the public authorities, companies and the third sector work together with smart leadership to be able to face the wicked problems of the future. This kind of networked society could quickly adapt to different changes, but to be efficient it must contain transparency, trust, co-operation, and innovativeness throughout the network. This ideal

example of the global network society could even be seen as a next step from our welfare society. There problems would be solved through co-operation, not by building walls. (Sydänmaanlakka, 2015, chapter 6.5.)

Even though the previous example discusses about the network society, the basics are same even in smaller surroundings. Whelan (2016, pp. 3–4) explains that networks in general can be seen as a form of governance where the governance is done based on the relationships of involved actors which are dependent on mutual reciprocity and trust. One special form of networks, called security networks, are explained to be a set of actors which have formed relationships to enhance specifically security-related goals. (Whelan, 2016, pp. 3–4, 19.) The security networks are also formed so that the participants can distribute responsibilities, resources, and uncertainty between each other more evenly and with better efficiency than in ordinary vertical structures (Dupont, 2004, p. 78).

These security networks can be divided into four separate levels. *Local security networks* are told to be networks which harnesses public and private resources from local communities to address different challenging problems such as crime. These local networks could be seen as an information exchange on both the problems itself and the resources available to tackle the problems. These local security networks are based on the efficiency of solving the problem itself. *Institutional networks* are a form of networks which addresses inter-institutional projects or the resources of usually governmental agencies. These are based on efficiency, which means in this sense the rational and the optimal use of the resources. These networks rarely include any community level actors. *Networks without borders* are international security networks including actors from different countries. And, *informational networks* are a form of networks where the information is shared between the nodes with different technical means such as computer programs. (Dupont, 2004, pp. 79–84.)

The need for this kind of an ideal adaptive governance method to the wicked problems is nothing new in the field of security governance. Ratcliffe (2014 pp. 149–150) discusses how for example in the traditional police work, networking is a must, and states that to be able to truly manage complex issues like crime, police must recruit other agencies and actors or join different networks. However, this kind of networking

in the field of security includes a lot of challenges. Crawford's (2006, pp. 460–461) discussion about British Community Safety Partnerships shows one kind of an example of these challenges. These partnerships include a large variety of different actors even outside of the traditional security field. They were established to offer more comprehensive and effective governance to crime and its prevention. Still, it is claimed that in many cases these networks have mostly failed in their tasks. This was told to happen due the lack of autonomy of the networks to implement local actions. Instead, they directly followed only the national goals and command, whether those national issues were even relevant at the local level. In addition, the minimal inclusion of a voluntary sector, private sector, and the non-existent community involvement hindered the efficiency of these networks. Overall, these networks were claimed to be riddled with hierarchical command and a lack of mutual trust and reciprocity. (Crawford, 2006, pp. 460—461.) Exactly those ingredients which were mentioned to be the main requirement for working and efficient networks.

What might be causing some these problems and challenges could be the special form of the security networks. Whelan (2016) addressed this specialty of the security networks in his research discussing about the national security networks. He addressed five separate parts which could create challenges in the security networks. Those parts are *structure, culture, policy, technology, and relationships* of the networks. (Whelan, 2016.)

The structure of the network is one important element in these security networks. Security networks can be either *all-channel networks* or *hub networks*. In the all-channel network the information is shared directly between all the participants while in the hub network all information is shared to the central governing actor which then must share the information back to all the other members. The all-channel network enables better and more fluent information sharing, where the hub network is especially good in for example an emergency situation where one central governing actor is required. The security networks might also be somewhat exclusive with their members which in excessive forms could cause issues especially when the need to include additional members is not recognised. This exclusiveness might be intentional or responsive act, but it is important to understand that some level of flexibility might be crucial to ensure that the network is able to do its tasks. (Whelan, 2016, pp. 43–62.)

The network culture is the second aspect important to consider when discussing the security networks. This means the values, beliefs, and attitudes of the whole network and the individual participants of the network. Issues might be caused if the individual roles of the members are not understood, and this alone could make it difficult to achieve the end goals. Also, varying individual organisational cultures might clash. For example, the level of confidentiality where the members normally operate might differ between the participants. There could be even legislative background factors related to the confidentiality or other matters, causing challenges in the co-operation. Varying cultural differences could easily make fluent information sharing more challenging and hinder the efficiency of the whole network. (Whelan, 2016, pp. 63–80.)

The network policies have a big impact on the efficiency of the network. Good and working formal policies might for example reduce the possibilities for an individual actor to prioritise their own goals before the goals of the network. These policies and agreements could also increase mutual trust allowing more fluent co-operation. However, in varying networks which includes different members, these common rules might be difficult to be established. Also, individual organisational policies of the security related actors might cause challenges. For example, the need-to-know principle, which is very often interpreted even too strictly by security organisations, might limit the overall possibilities of the network when the information is kept hidden even without any reasonable reasons for it. (Whelan, 2016, pp. 81–96.)

The technology of the networks can also be both disabling and enabling factor in the network. Usually, a working technology allows better information sharing. At the same time this creates a lot of challenges especially when the individual actors very often use their own individual and separate systems which does not communicate between each other. Also, the amount of information possessed by the actors could be vast, causing difficulties when trying to find out the important pieces from the overall material. Usually, different technological solutions should be created to improve the abilities of the network, not just purely to join different participants' systems together. (Whelan, 2016, pp. 97–118.)

The last piece of the puzzle is the relationship angle of the networks. The relationships are usually based on different agreements on joining a network, but a working network

requires both sides of social networking: informal and interpersonal relationships. This is a challenging issue in the networking, because interpersonal relationships usually allow very fluent co-operation, but they lack the stability and are purely dependant on the individual to staying on the job which resulted the participation in the network. On the other hand, purely formal relationships might lack the same kind of a trust which these informal relationships have. Good formal processes of the network could still promote even the formation of these informal relationships. But these relationships are not limited to the personal level. Interorganisational relationships are also based on trust and these relationships can also include varying amount of conflict. Just different organisational cultures or even historical indifferencies could damage the organisational relationships causing difficulties when networking. (Whelan, 2016, pp. 119–140.)

While the previous five specific examples where from the national security network research, these could easily be compared to more traditional lower-level security work. Similar issues have a great effect in all the field of security, where these varying organisations operate in this field riddled with issues such as a need-to-know-secrecy. Creating the common situational awareness referred in this research might require the creation of a local security network with some aspects from the information network. To create this kind of a network one must overcome the challenges of the security related networks. While the example by Sydänmaanlakka (2015, chapter 6.5) from the network governance at the level of global society far exceeds the local governance discussed in this research, in both size and complexity, there are still many similarities to be transformed into smaller scale. Worrying security situation regarding crime and deviance could be seen as a one wicked problem requiring efficient co-operation from the public authorities, the private companies and the third sector. This co-operation could be improved through the common situational awareness, and to create this, at least some amount of networking is required in the process. To be efficient, this kind of a network even in a smaller scale will require the same ingredients than the networks in the larger scale. Those ingredients are transparency, trust, co-operation, and innovativeness.

2.3 Situational awareness

One way to allow a better co-operation and coordination between different facets operating around a shared issue is the concept of a common situational awareness. The following subchapters presents the situational awareness as a process and as a product through the concepts from intelligence studies, intelligence-led policing, and knowledge-based governance.

2.3.1 Situational awareness as a process

As discussed during the introduction chapter the situational awareness could be seen as a process and as a product creating and utilising information, or more precisely, intelligence to form a picture of the current situation. This picture could then be utilised to create a perception of the future events. This conceptualisation of the situational awareness as a process and a product makes the definition of the requirements for the creation of a situational awareness possible.

In more detail, the process of situational awareness, which is presented on the Figure 2, can be separated into three different levels. Endsley (1995, pp. 36–37) explains these levels to be a *perception*, *comprehension*, and *projection*. The first level of the perception includes the status, attributes, and dynamics of the relevant environment to be perceived. The second level of the comprehension means that the previous perception must be exceeded, and beyond just the perception of those previously mentioned factors, their relevance to the current situation and pertinent goals must be understood. The third and the highest level of the situational awareness is the projection of the future status. This means that the information gathered from the levels one and two are used to project the future status of the situation allowing for example more time to be prepared, adjust to, or even prevent the upcoming events. (Endsley, 1995, pp. 36–37.)

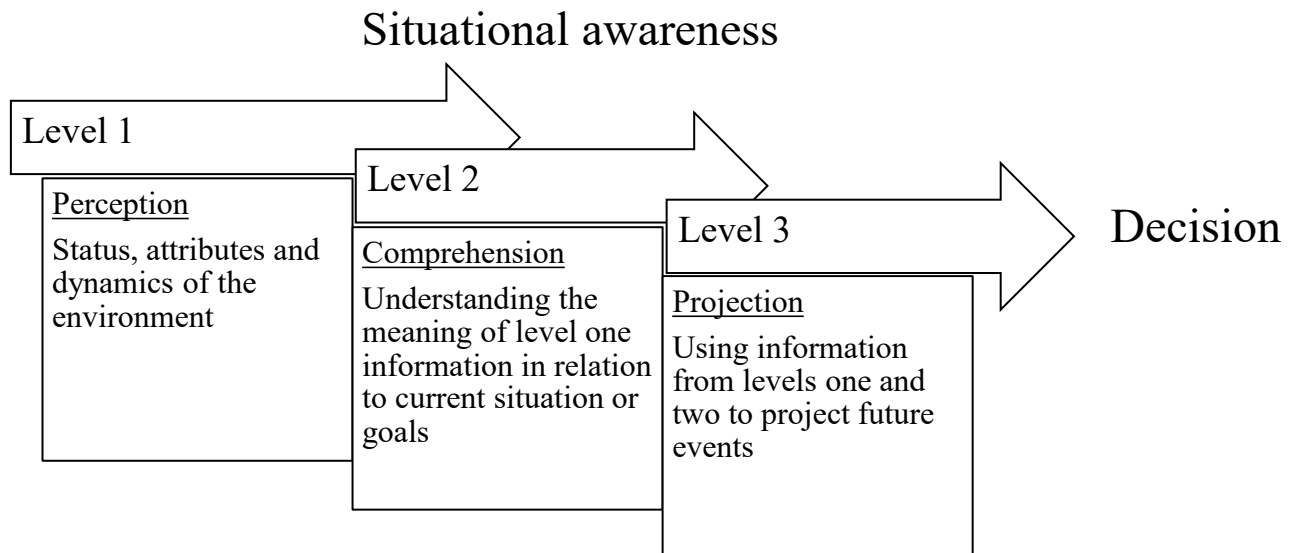


FIGURE 2. Process of the situational awareness based on Endsley (1995)

Concluded from the description, the situational awareness as a process requires intelligence gathered from the situation and created during the process itself. Like discussed before, the intelligence as a concept might be seen somewhat ominous, so it might be easier to be understood through Grieves (2004, p. 25) description of the information designed for action. In this case the situational awareness as a process could be understood to be formed from the intelligence gathered about certain relevant matters. However, the situational awareness could also be understood as a process which creates intelligence (the situational awareness) from the information available at the moment. Whichever is the case, the concept of intelligence is relevant when discussing about situational awareness. Crump (2015, p. 7) discusses about the intelligence and mentions that different intelligence materials must be responsive and proactive. Important factors making the intelligence materials useful are their timeliness, accuracy, relevance, and actionability. (Crump, 2015, p. 7.)

When addressing the situational awareness as a process which uses the intelligence, these specific requirements for an actionable intelligence needed to form the situational awareness might change depending on the context of the situational awareness. To see the changes in the requirements, the context where the situational awareness is used in, could be divided into three different levels derived from the concept of an intelligence-led policing. Ratcliffe (2007a, pp. 4–5; 2011, p. 99) describes that the lowest level for the use of intelligence is a *tactical level*. In the tactical level intelligence is created to

support these so-called frontline workers, and it takes a case-specific approach to address certain individual issues. For example, in this level the intelligence could be used in the investigations to achieve an enforcement objective, such as the task of “catching the bad guy”. The second level is an *operational level* which is more long-distance oriented than the case-specific tactical level. The operational level focuses on more broader issues like local crime problems. It can also be utilised in varying partnerships. In this level the intelligence could be used to achieve certain operational goals for example through supporting area commanders in their resource deployment or when planning certain crime reduction activities. The highest level is a *strategic level* where the goal is the most future oriented. In the strategic level the intelligence is used to provide insights, understanding and to contribute to broad strategies, policies, and resources. (Ratcliffe, 2011, pp. 91, 99, 163; Ratcliffe, 2007a, pp. 4–5.) The situational awareness could be constructed in any of these levels.

The intelligence used in any of these levels can also be divided into four separate categories. The *basic intelligence* describes what has happened, in a meaning of allowing the decision maker to know the background of a situation through historical perspective. The *current intelligence* describes what is happening and allows the decision maker to know the status and significance of the ongoing events and other matters. This usually includes assessment of the significance of these issues in short term. The *warning intelligence* provides information on how the future is unfolding and allows the decision maker to be alarmed if for example something threatening is happening, giving time to address these issues. And lastly, the *estimative intelligence* seeks to know what could happen in the future and to provide a more forward-looking angle about the situation. (Quarmby, 2007, pp. 130–131.)

These previous conceptualisations can be used to understand how the requirements of intelligence for the creation of situational awareness varies at different levels. When discussing about the local level situational awareness which is common between different organisations, the major change happens on the timeliness of the intelligence used to create the situational awareness. For example, the strategic level decision-making focuses on long distance goals, which means that to allow a strategic level situational awareness, the process does not necessarily require constant real-time information about the current situation, but more likely a cyclic review of it. At the

same time, the tactical and the operational contexts focuses on more current issues like acute events or more real-time resource coordination. Similarly, the situational awareness utilised on these contexts requires more continuous real-time information to allow it to be useful in the tactical and operational work. Similarly, the level of the required intelligence varies based on the level of the future orientation of the context. For example, on the strategic level the intelligence must include estimative angle to allow broader perspective for strategic decision-making. The following Figure 3 presents the variations in the timeliness and in the future orientation requirements at different levels of use, adapted from the previous conceptualisation by Endsley (1995), Crump (2015), Ratcliffe (2007a; 2011) and Quarmby (2007).

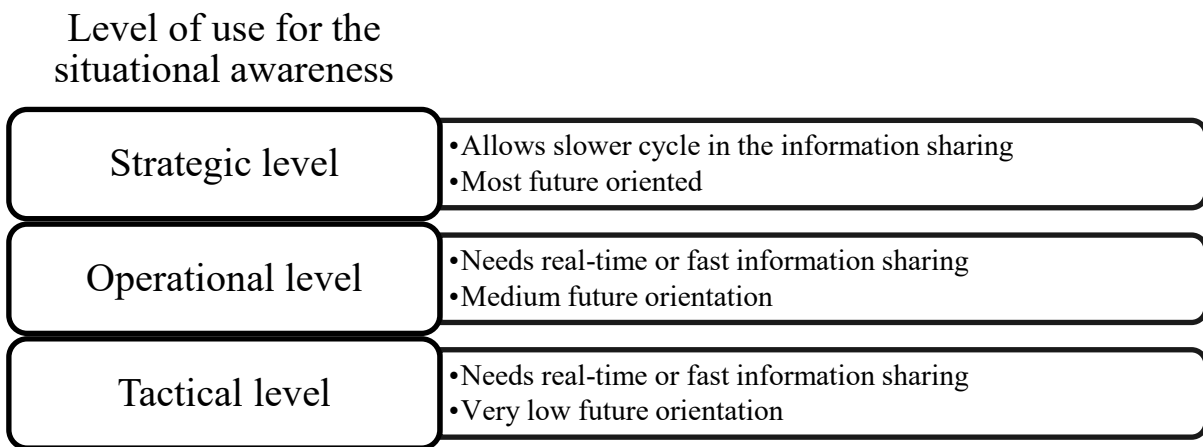


FIGURE 3. Timeliness and the future orientation of a situational awareness by the level of use

What also needs to be considered is that as a process, the situational awareness can be flawed. According to Dominguez et al. (1994, p. 11) and Sun et al. (2017, pp. 67–69) the situational awareness can be flawed in many varying ways. An analyst or a human in general is seen as the core of the situational awareness. This means that for example, just individual perspectives of the analyst can modify the result of the situational awareness. If the process includes the utilisation of any technical tools, there are questions of what and how the data is analysed and what are lifted to the “eyes” of the human analyst. Thus, the end result of the situational awareness can be either good or bad, and it depends on a lot of the process of building an accurate and a complete picture of the situation. (Dominguez, 1994, p. 11; Sun et al., 2017, pp. 67–69.)

As a process situational awareness requires timely, accurate, relevant, and actionable intelligence so at least some of these flaws can be avoided. Depending on the issue, the information provided for the construction of the situational awareness must be chosen correctly, or the situational awareness process creates flawed and unsuitable intelligence product for the decision-making. Possibilities of an error makes the process of the situational awareness important to be understood, so that the result can be as correct and useful as possible. If the context and the requirements for the situational awareness process are understood, the result is a proper situational awareness which can be used to improve decision-making.

2.3.2 Situational awareness as a product

As a product, situational awareness can be seen as a tool of decision-making in knowledge-based management. When discussing about public governance, Schwella (2014, p. 84) claims that varying inputs and influences can benefit ethical and effective governance. Evidence, information, knowledge, and informed public participation enhances any actions and analyses of government from the perspectives of quality and legitimacy. Overall, ideas and evidence should replace ideology and emotions in governance. (Schwella, 2014, p. 84.)

Scwhella (2014, p. 84) mentions that “ideas and evidence-based governance benefit from knowledge, learning and innovation and, on its turn then benefits democratic good governance for effective and ethical policy making and service delivery.” Schwella (2014, pp. 86–87) emphasises especially the learning part and has designed four questions to guide the learning process of knowledge-based governance. In order to learn and develop, organisation or leader must ask four questions. Firstly, they need to know what happened. Then they must ask why did it happen. And after that, what can we learn from this? Lastly, they must find out how can the learning be used and built back to the system to improve the quality and the performance of it. These questions allow the organisation to form learning-based systemic institutional learning process and systems-based capacity building. Learning the knowledge-based governance allows organisations to handle wicked problems better. (Schwella, 2014, pp. 86–87, 90.)

Without addressing the knowledge-based governance more thoroughly, this example shows that implementing legitimate, effective, and learning governance requires information or more specifically, intelligence. As a product, the situational awareness itself can be seen as an intelligence product allowing better governance and learning which increases better decision-making abilities.

Mackay and Ratcliffe (2007, pp. 148–150) separate different intelligence products into three forms. *Descriptive products* describe issues at hand and are used usually as reference material improving understanding of the operating environment. These kinds of products are the most often public in their nature. *Explanatory products* try to find out reasons why something happened. Depending on the wishes of the recipient, these products can be placed on any kind of specific context of a time and place. Usually, these kinds of intelligence products can be used to understand how something or some event effects a certain context. *Predictive products* are usually seen as strategic intelligence products trying to forecast future events. These predictive products are usually drawn from the results of the two previous levels of intelligence products. (Mackay & Ratcliffe, 2007, pp. 148–150.)

Just like the situational awareness, intelligence itself is claimed to be a process and a product (Ratcliffe, 2007a, p. 7). This process creating the product is usually explained through the intelligence cycle which is shown in the Figure 4. Even though for example Phythian's (2013a) book presents a lot of critique for the traditional idea of the intelligence cycle, it still presents a good basic idea of how these intelligence products are created in the intelligence process. The cycle itself contains five phases starting from the direction phase. The direction phase starts the cycle when the customer requests intelligence on a specific subject. The second phase, the collection, involves gathering raw data or information from different sources which is later utilised to create the intelligence. In the third phase of the analysis this gathered information is processed and eventually transformed into intelligence. Then this relevant intelligence is distributed to the customers in the dissemination phase. In the last stage, the whole process is evaluated, and possible development ideas are recognised. (Ratcliffe, 2007b; Phythian, 2013b, pp. 1–4.)

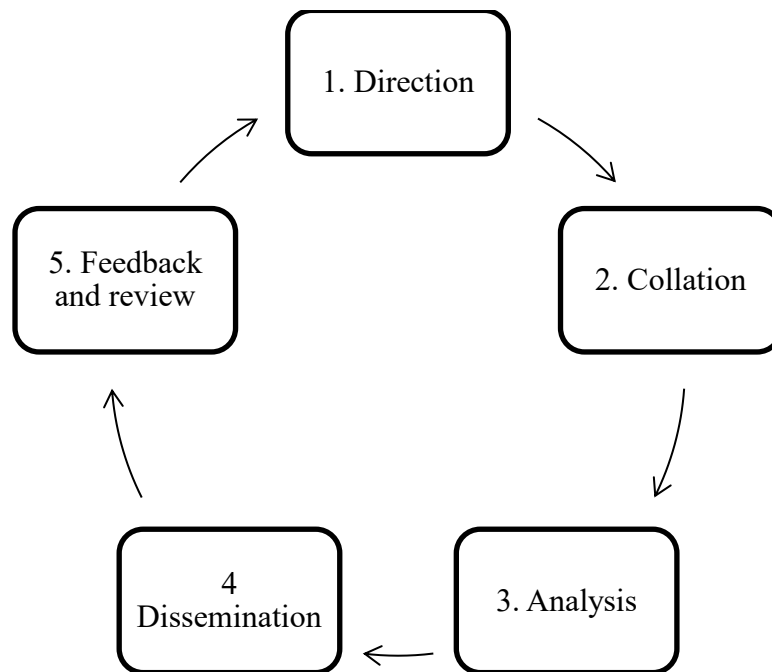


FIGURE 4. The intelligence cycle (Ratcliffe, 2007a, p. 6)

This simplified process paints a clear idea of the meaning of the intelligence as an information designed for action. In this process a customer needs an intelligence on a specific issue and orders this from the intelligence producer. This intelligence producer then creates the intelligence product from the information available from different sources. All this is conducted, so that the customer has a possibility to make decisions and has the intelligence required to make those decisions as correctly as possible. The Figure 5 presents a simplified process drawn again from the intelligence-led policing about the role of the intelligence in decision-making.

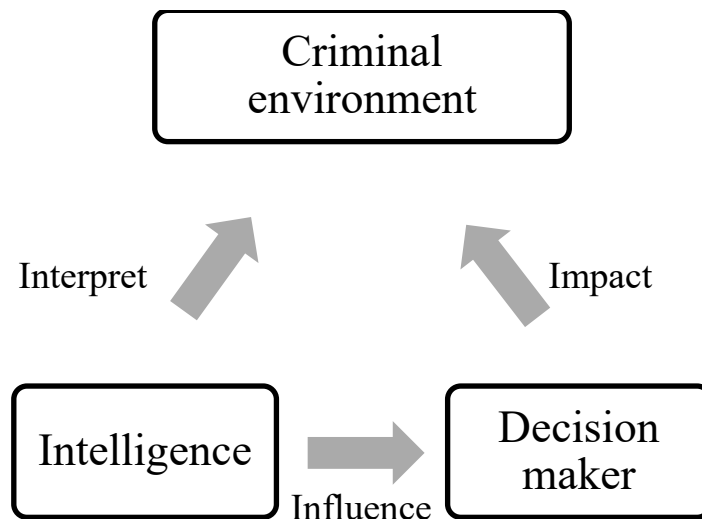


FIGURE 5. The simplified intelligence-led policing model (Ratcliffe, 2007a, p. 8)

Ratcliffe (2007a, pp. 7–8) discusses this role of the intelligence as an influence in decision-making by explaining the three-I-model, presented on the Figure 5. In this model the analyst constructing the intelligence product actively interprets a criminal environment, seeking information, so that an actionable intelligence product can be created. This intelligence product is then disseminated to the decision makers to influence their decision-making. This intelligence-based decision then, in theory, has a better impact on the criminal environment because this intelligence product allowed this decision to be correct. (Ratcliffe, 2007a, pp. 7–8.)

This whole conceptualisation can be used to understand how the situational awareness as an intelligence product and as a tool of decision-making needs to be constructed. If the situational awareness is a product used in decision-making, it must be created from the right issue needed by the customer. Situational awareness itself can be information, but in order for it to become intelligence, meaning an information designed for action, it has to be focused and created from relevant materials. For example, a situational awareness on a crime situation needs to be focused on the factors around the crime, not for example to the information about people slipping on sidewalks. Situational awareness as an intelligence product requires similar implementation described before. For it to become actionable, it needs to surround the issue which the decisions are made, it need to contain relevant information, and it needs to be properly disseminated to decision makers, or it lacks usability.

3 METHODOLOGY

This chapter includes the argumentation for the methodological choices of this research. First, the methodological choices resulting in the utilisation of the qualitative research methods are justified. Later, the methods of the data collection and analysis are explained in more detail. These include the main data collection method which was semi-structured theme interview and the selection process of the interviewees. The data was analysed using thematic analysis which is also described in this chapter. The reliability and validity of this research are addressed during the last subsection.

3.1 Methodological choices

This research was conducted using qualitative approach. Vilkka (2021, p. 96) states, that the focus of qualitative research is to show something about the selected issue, what is otherwise hidden from any direct observations. These revelations of some sort are found through interpretations made during the research process (Vilkka, 2021, p. 96). Vilkka (2021, p. 96) refers to Varto (1992, p. 64) while describing these interpretations as a process of opening different meanings and relations of the studied issue. These meanings and relations can then be used to create different models, descriptions, or other information of the issue at hand (Vilkka, 2021, p. 96). This research was seeking answers to the research questions through interpretations of varying organisational perspectives. It was aimed to create new information about the issue through these interpretations. Therefore, qualitative approach was recognised as the most suitable for this research, early in the planning stage.

To answer to the research questions in full, these previously mentioned individual organisational perspectives had to be somehow recognised. To do so, interviewing selected experts representing those organisations was seen as the most suitable way to gain this information. Vilkka (2021, p. 99) mentions, that while there are a large variety of data collection methods in qualitative research, the most frequent choices are different interviews. This choice of interviews as the main data collection method also fortified the choice of the qualitative research methods.

While this research was conducted mainly through qualitative methods, it is still important to remember that according to Alasuutari (2011, p. 26), quantitative and qualitative research methods can be separated, but those methods and analysis can also appear in the same research. So, the idea of a clear division between those two is not at all necessary (Alasuutari, 2011, p. 26). Overall, this research was mainly conducted through qualitative approach, and the analysis was conducted as a qualitative analysis, but there were still some kind of traditional quantitative perspectives such as calculations, for example when addressing the analysis section and interpreting the results from separate interviewees.

In relation to the overall methodology, Tuomi and Sarajärvi (2018, p. 60) claims, that in qualitative research there is no point to try to find one combining methodology. They present one broad alternative methodological combination based on the ideas from realism where there is one truth independent from the observer. This idea about the one and single truth creates an issue where it can be argued whether this experience of the truth is the same to all and lead to equal results? They answer to this discussion with this previously mentioned alternative methodology combining ontology of critical realism and social epistemology. This forms the conclusion where humans live their own experiences and tell varying stories about them depending on their memory, situation, and location. This idea also passes the problem whether there really are one truth or varying different constructions, which then would lead to the issue of “right” and “wrong” interpretations related to the one truth. (Tuomi & Sarajärvi, 2018, pp. 60–61, 119.) This methodological idea describes the challenges of qualitative research and as such, guided the research process especially during the data collection. This idea led to the need of choosing interviewees from multiple different organisations around the theme, so enough of these varying experiences and stories told about them could be recognised and presented in this research. Understanding, that the experiences and descriptions of the researched issue varies, was also used to recognise, and present broader perspective when answering to the research questions.

3.2 Data collection

The main source of data in this research was interviews. These interviews were conducted as a variation of the so-called theme interview to selected experts working

with the theme of this research. This variation was a combination of semi-structured interview and theme interview. In addition to the interviews the data used in this research also included few statistics collected by the interviewed organisations about the security situation of the downtown area. Those statistics were also analysed through qualitative methods.

3.2.1 Semi-structured theme interview

According to Hirsjärvi and Hurme (2008, p. 47) theme interview is one form of the semi-structured interview method. The semi-structured interview lies somewhere between structured and unstructured interview. Usually, in semi-structured interview the format of questions is same to all interviewees, but the interviewees can answer openly with their own words. The theme interview, one specific version of the semi-structured interview, usually seeks to answer questions through pre-selected relevant themes instead of precise individual questions. These themes are same to all the interviewees while the order of the questions and the questions themselves can vary. The main advantages of the theme interview are that it does not tie the interview strictly to qualitative or quantitative perspective and it does not limit the number of questions or the depth of the interview. The theme interview method also considers that different interpretations are formed through human interaction, and it allows the voice of the interviewee to be heard. (Hirsjärvi & Hurme, 2008, pp. 47–48.)

A slight variation of this theme interview method was utilised in this research. Early in the planning stage the need for more open discussion, and the presentation of ideas and interpretations by the interviewees were recognised to be important. Still, at the same time there were certain important themes and some specific questions which were seen important to be discussed with every participant. This also meant that a fully unstructured interview was not suitable method for this research. In other hand, to be sure that these topics could be discussed in necessary depth and with enough flexibility, a fully structured interview was also rejected.

In the theme interview questions or themes can be selected by using three different methods. The first, and possibly the most problematic way is purely through researcher's intuition. In this way the researcher can choose themes or questions just

with creative ideation, but without any theoretical bound, solid analysis of the answers might be difficult. The second method is to seek interview themes from literature and previous research. The third and last method is to find the themes from relevant theory. This last method is basically the process of transforming theory into the interview themes. It is claimed that the best way to create themes is to combine all the previous methods, because it is important to understand the researched theme through literature, previous research and its theoretical background, but it is also important to be creative. (Eskola, Lätti & Vastamäki, 2018, pp. 36–39.) In this research there were three different themes which were recognised to be important for the research. Those themes were recognised through the combined use of all the three theme selection methods discussed in the previous chapter. These themes were *security*, *situational awareness* and *information gathering*, and *information sharing*.

In theme interviews researcher should create a pre-made framework for the interview. This should not be too strict and long causing a risk of blocking any fluent conversation. At the same time, it needs to be constructed in a way which make sure that each theme is addressed during the interview. In relation to this framework, it is specifically mentioned, that the theme interview method does not include the use of precise questions and answer options. (Eskola, Lätti & Vastamäki, 2018, pp. 25, 38.) However, in this research the need for some specific questions was recognised. In the end, there were thirteen pre-decided questions to support the three themes. The interview itself was not limited to these questions and in some cases, some of the questions were not addressed during the interview if those issues were dealt with previously. So, while there was the need for some supporting specific questions, a slight variation of the theme interview including specific questions, like in the semi-structured interview, was recognised as the most suitable method. This ensured that there were enough room for open discussion around the selected themes with the interviewees. And of course, this made sure that every required individual subject was also addressed during the interviews.

3.2.2 Interviewees

The status of the interviewees created a specific challenge for the research. All the interviewees were representing pre-selected organisations and were seen as experts in

their own fields. Alastalo, Åkerman and Vaittinen (2017, p. 181) explains that while expert interview is not an individual interview method, there are some special features when interviewing an expert. The definition of an expert might be rather broad: one could call everyone as experts of their own lives, but this idea of the expertise could dilute the label of an expert in general. One way to define expertise is when a certain person has collected special information through science-, professional-, or institutional experience. This special information or experience then separates this person from ordinary persons. This variety in defining expertise creates challenges for the research when the researcher must first define and recognise those experts essential to the research issue. Usually this means that these experts must have some kind of special information about the research subject what others lack. (Alastalo, Åkerman & Vaittinen, 2017, pp. 181–182.)

In this case the expertise was defined through the scope and the theme of the research subject. The research was focused on the security situation around the downtown area of the City of Tampere through the theme of the common situational awareness between the public, private and third sector organisations working around the issue of security. Like Alastalo and Åkerman (2010, p. 313) explains, in research where the object is to create interpretation of a certain unique phenomenon the experts needed must be involved in this certain phenomenon. This made the definition of the expertise easier when it was recognised that the suitable expertise needed for this research had to be professional or institutional experience from those organisations working with the security situation in the downtown area of the city of Tampere.

Drawn partially from the definition of security and the discussions through criminological perspective, conventional security actors, the City of Tampere, and social work organisations were recognised as the most important subjects for this research. This limitation left out for example different organisations working around the safety side of this theme. For example, rescue services, emergency medical services and traditional health services were left out. While those facets with great certainty have relevant information about the overall theme, they were intentionally left out to narrow down the research directly towards the definitions discussed previously.

As a result, eight different organisations working around the security situation within the downtown area of the city of Tampere, representing all three sectors, were recognised as holders of this needed expertise. Public sector representatives were chosen to be *the risk management, safety, security and preparedness team from the Central Administration of the City of Tampere, the Outreach Work from the Social and Health Services of the City of Tampere and the Central Finland Police Department*. Private sector was represented by three different *private security companies* which all had customers in the downtown area where they had manned security personnel in locations open to the public. The third sector was represented by two individual *third sector organisations working in the field of social work and outreach work* in the downtown area. This further geographical and task-based limitation to the private and to the third sector representatives were done to make sure that those private security companies and the third sector organisations have a so-called hands-on connection to the theme and to the scope of the research.

The specific topic of the common situational awareness required a further understanding and knowledge from within those organisations, and their special features and capabilities. In addition, interviewees had to have the knowledge of the use of information in those organisations. The overall need for the research itself was found in co-operation with the director of risk management and security of the City of Tampere. This co-operation also made it easier to find out those individual experts working inside these selected organisations which were relevant to the subject. While the organisations itself were easier to be selected based on the research subject and the theme, finding those specific experts for the interviews required information from the director of risk management and security of the City of Tampere. In addition to the expert identifications made during previously mentioned co-operation, this research also utilised the snowball-method. This method is mentioned by Alastalo, Åkerman & Vaittinen (2017, p. 188), and they describe it as a process where researcher can ask recommendations for the next interviewees from the experts to reinforce the research. This was especially utilised in the social sector, where the significant third sector organisations and their most suitable experts relevant to the research were recognised through recommendations from another interviewed organisation.

Conducting these expert interviews themselves require some special planning. It is important that the researcher can make a good impression starting from the invitation stage. First, the researcher must present oneself as an expert, and of course express the research to the experts in a suitable manner which makes the experts understand its importance. Making a good impression is important because one expert can open a lot of doors towards other experts in the community. This makes a big difference if the researcher can get to be introduced by an expert, instead of trying to introduce oneself, it could ease the process of getting consents to the interviews. Especially having politicians or authorities to accept invites to the interviews can be very challenging. At the same time those facets are hard or sometimes impossible to replace, which makes these small nuances critical for the research when trying to interview experts. (Alastalo, Åkerman & Vaitinen, 2017, pp. 187–189.)

Hirsjärvi and Hurme (2008, p. 84) emphasises the importance of the process of inviting interviewees to the interview. Method of the invitation might be crucial to get consent for the interview. These invitation methods vary a lot from a personal visit to a letter or even a phone call. If the invitation is made with a letter, it should be short and formal. Involving a signature from a representative of the research institute can also increase its value to the interviewee. While invitation is always voluntary and the decline from the interview must be respected, certain amount of persuasion cannot be seen to be ethically wrong. In many cases, people might seek reasons to decline and just by explaining the issue in more detail might turn refusal into excitement. (Hirsjärvi & Hurme, 2008, pp. 84–85.)

Especially in this research the invitation process was seen important because all the interviewees were experts in their own fields. In this case a letter or more precisely an e-mail letter was chosen as the primary method of invitation. This letter was sent directly to the experts, and it included official invitation letter explaining the research in more detail. This letter also purposefully included an acknowledgment from both the director of risk management and security of the City of Tampere and the professor supervising the master's thesis to make it more valuable and official to the recipient. Especially, the acknowledgement from the director of risk management and security of the City of Tampere was included to intentionally highlight the co-operation, so that all the experts invited to the interview recognised that they were in a way introduced by another

expert. If the recipient did not answer to the invitation letter in a two-week time scale, a double-check phone call was made to these recipients ending in an agreement of the interview date in all the cases. Whether resulting from good planning or not, all the intended organisations participated in this research.

The need for good planning does not end in the invitation stage. The general ideas of an interview are simple: to find out what the interviewee thinks, and to find out the main issues relevant to the research subject (Eskola, Lähti & Vastamäki, 2018, pp. 24–25). This emphasises the role of good pre-thought questions. According to Alastalo, Åkerman And Vaittinen (2017, p. 188), especially in the expert interviews the questions play significant role for the interview to be successful. Usually, these interviews require tailored questions but at the same time enough flexibility to be ready to modify the question frame during the interview. These interviews also require active participation and somewhat argumentative touch while conducting the interview. Good pre-familiarisation to the themes and organisations is required from the researcher to get more detailed information and explanations from the experts. It is important to keep in mind, that sometimes these experts might try to use the research or the researcher to bring forth their own ideologies or they can just try to present their organisations in polished public relations -style. (Alastalo, Åkerman & Vaittinen, 2017, pp. 189–191.)

These special challenges in the expert interviews supported the choice for the semi-structured theme interview -method with supporting questions requiring only open and explanatory answers. This way the experts had to explain in their own words how and why some of the issues unfold. The chosen method left room for flexible touch during the interviews which allowed the researcher more room to clarify different details if necessary. For the same reasons some of the supporting questions in the theme interview were intentionally formed in slightly argumentative way to seek the answers more thoroughly, for example, why something is done. This careful questioning of some of the answers was also utilised during the interviews to find out more specific information or motives behind the answers.

3.3 Handling of data and analysis

Qualitative analysis can be divided into three different categories. Those are inductive, deductive, and abductive analysis. In this research the analysis was conducted as a theory guided analysis which usually follows the logic of an abductive analysis. The theory guided analysis is a method where theoretical background helps and guides the analysis process, but the analysis itself is not based on theory. In the theory guided analysis, the analysis units are chosen from the data, but the previous knowledge guides the analysis instead of it being purely data driven. It is also a separate method from the theory-based analysis in a way where it is not a method for testing those theories, but more of a method for opening new ideas from them. (Tuomi & Sarajärvi, 2018, p. 80–82.) In this case the previous knowledge guided the analysis process forming a reference point and a base for the discussions varying from security to situational awareness. This background was used to guide the analysis process especially in the last steps of forming main themes in the analysis and when discussing about the results.

The analysis process itself started from the handling of the raw interview material. Just like in this research, theme interviews are typically recorded to ensure fluent conversation thorough the interview (Hirsjärvi & Hurme, 2008, p. 92). Usually, to ensure a better possibility for further analysis, these recordings must be transcribed. Before any transcription can be done, researcher must choose the level of transcription, which is dependant of the research question. The level of transcription can vary from the transcription of just the contents of the discussion to more precise transcription of tones and other features of the discussion. (Ruusuvuori & Nikander, 2017, pp. 367–368.)

According to Ruusuvuori and Nikander (2017, p. 368) when only the content is analysed, transcription usually include all the spoken language word-for-word, but different more precise features and so-called mini responses or breaks might be left out. When the research focuses on the matter itself, and the surroundings where this analysed material is created are not important, this method can be sufficient (Ruusuvuori & Nikander, 2017, p. 368). In this case the level of analysis was selected to be focused on the content itself, meaning word-for-word transcription without any features or more in-depth transcripts. Any in-depth analysis of the discourse itself or the

interaction during the interview situation was not necessary to answer to the research questions.

Generally, in qualitative research the actual data analysis can be both analytical and synthetical. Analytical side is usually presented through organising collected material in different themes or coding it to separate pieces for it to be more easily approachable in the terms of interpretation. In the end, the main point is to find out the thematic structure generating synthesis which supports the whole analysis. (Kiviniemi, 2018, p. 69.)

Tuomi and Sarajärvi (2018, pp. 78–80) mentions, that the qualitative analysis starts from researcher's decision about what is interesting or relevant in the collected material. Based on that decision, the material must be cropped to those interesting or relevant materials only. When these relevant materials are separated from the entire material, they can be sorted and analysed either by classes, themes, or types. Analysing the material through themes means that the material is analysed to recognise interpretations or explanations of certain themes or topics from the material. (Tuomi & Sarajärvi, 2018, pp. 78–80.)

This research was focused on finding those interpretations or explanations of these certain themes, so a thematic analysis was recognised as the most suitable approach in relation to the research questions. The analysis in more detail followed the process described by Tuomi and Sarajärvi (2018, p. 104) while referring to Braun and Clarke (2006). The process followed during this research, is presented in more detail on the following Figure 6.

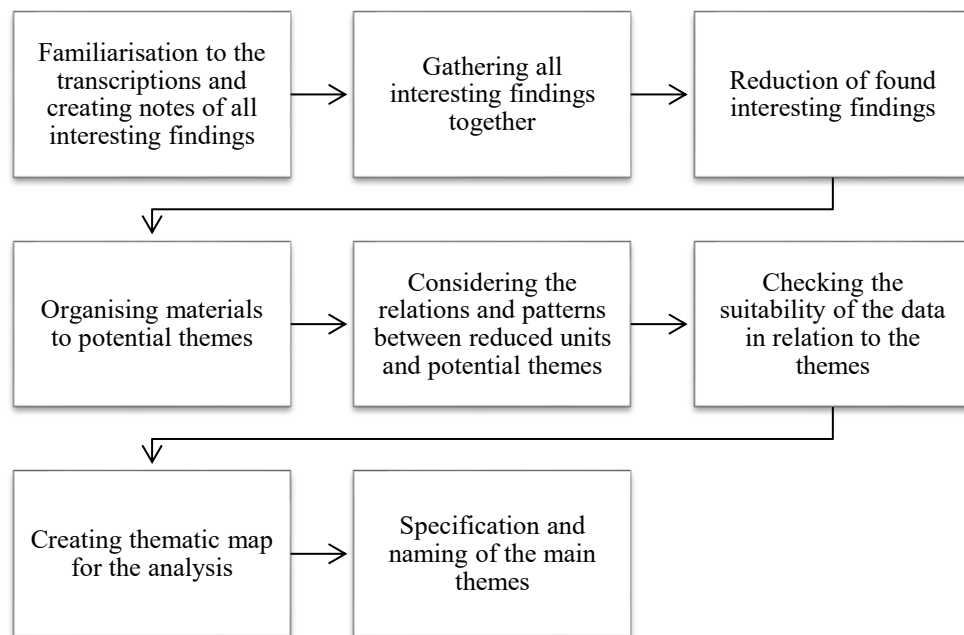


FIGURE 6. Thematic analysis process (Tuomi & Sarajärvi, 2018, p.104)

In total there were 95 pages of raw transcription data from the interviews. These transcriptions were written with Word-software using a font called Calibri, font size 11 and line spacing of 1.0 with all other options following the standard settings of the software. Like all qualitative research, this thematic method can also end up in different interpretations depending on the researcher analysing the data (Tuomi & Sarajärvi, 2018, p. 105). Especially, when the amount of the original data was so broad, it was recognised that re-visiting the original data constantly through the analysis process was important. This way the interpretations and the thematic structure could be kept as close to the original data as possible.

The analysing process itself was conducted mostly using Word and Excel -softwares. Word was used in the first steps of familiarisation of the data and marking interesting findings from the data. Further handling of the data and categorisation to the themes was conducted in Excel using its tables. The thematic maps were created as a mind-maps in different software and using traditional physical paper.

During this research the participants were interviewed about the data they collected from the security situation around the downtown area. Some of these organisations

collected specific statistical data by themselves, such as different incidence statistics from their own operations. This research also included a brief anonymised analysis of the few materials granted for this research in addition to the interviews. The analysis of these received statistics was conducted also through qualitative analysis methods. The analysis focused on identifying the similarities and differences of the data and arguing their suitability for situational awareness as described in the theoretical background section.

3.4 Reliability and validity of the research

In varying methodological literature, the general trustworthiness of research is usually presented through the two terms of validity and reliability. Validity means that the research has conducted what it promised, and reliability means that the research can be repeated. The use of these terms in qualitative research have been criticised especially when they are from, and most suitable to be used in quantitative research. In general, there are no unambiguous instructions for the evaluation of the reliability in qualitative research. While this is the case, in qualitative research these concepts of reliability and validity forms from the whole research process and its reporting in satisfactory detail. (Tuomi & Sarajärvi, 2018, pp. 119–122.)

Qualitative research approach means that there is no absolute truth which could be presented as the result of the study. It can almost be held as a researcher's personal construction of the researched phenomenon. Therefore, qualitative research is always an interpretative process. While this means that the results can be denied and other interpretations are always possible, the researcher should allow the reader a possibility to review how believable this interpretation is. This can only be achieved with good reporting. Researcher must clearly describe the used methods and the research process, so that the reader can understand what has been done, and what is the level of reliability of the research. (Kiviniemi, 2018, pp. 70–72.)

The terms of reliability and validity are not problem-free in qualitative research. Still, they were kept as a basic guideline while conducting this research. These terms guided the reporting in a direction where the readers have an ability to satisfyingly understand what, how and why something was done in the way it was done. These issues of

reliability and validity of qualitative research were minimised by explaining and arguing the use of different methods in good detail. Good reporting of the methods and the whole research process in general, were seen to increase the reliability and validity of this research in the traditional meaning of those terms.

This idea of the reliability of the research had to be considered during the individual parts of the research as well. For example, the interview process requires thorough consideration to increase its reliability. According to Alasuutari (2011, pp. 30–31), in qualitative analysis the use of statistical probabilities cannot be utilised. Individual interview usually creates so much material that to conduct enough interviews to collect enough individual subjects for the use of statistical analysis would be impossible. But at the same time, it is not necessary in qualitative research. (Alasuutari, 2011, pp. 30–31.)

Low number of individual subjects leads to the issue of sampling. The interviewees in this research were chosen with the purposeful sampling method. Purposeful sampling focuses on understanding a certain phenomenon more thoroughly (Hirsjärvi & Hurme, 2008, p. 59). It is often used in qualitative research when the focus is on thorough analysis of limited number of cases, but the idea is to give very focused picture of an individual research issue (Eskola & Suoranta, 1998, pp. 14–15). This purposeful sample begins from creating a sound theoretical background to identify relevant targets for the research, but in the end, it is the researcher's own decision what this relevant sample is (Vilkka 2021, p. 121; Eskola & Suoranta, 1998, p. 15). Hirsjärvi and Hurme (2008, p. 60) mentions that the researcher can try to indicate that this chosen sample does not contain any systematic bias. This can be evaluated by assessing the sample through the research problem and the goals of the research (Vilkka, 2021, p. 121). The goals of this research were to understand more about the possibilities and challenges of the creation of the common situational awareness between the public, private and third sector in relation to the security situation of the downtown area of the city of Tampere. This and the theoretical background of the concept led to the selection of those eight organisations mentioned during the previous chapter of interviewees. This sample was considered to represent a substantial amount of the actors relevant to the subject of the research and thus was considered sufficient. Any possible bias was tried to be reduced as much as possible by choosing multiple actors from each of the three sectors. Also, during the interview stage the number of possible participants in the interviews was left

open, so that the invited expert could choose to participate either alone or with companions. In the end, a total of 14 persons participated to these eight interviews making the answers in some cases represent more than just one individual expert's opinion.

According to Hirsjärvi and Hurme (2008, p. 35) interviews also contains a possibility of mistakes, especially when the interviewee might tend to provide socially acceptable answers. To get as straight answers as possible, the interview results were anonymised. Ruusuvaori and Nikander (2017, p. 375) explains the anonymisation process that during the transcription, the interview data must be anonymised in a way that no names, locations, or other identifying marks are presented, or they must at least be changed. This also ensures that the data itself does not form a personal data register. Of course, during the transcription and the research process, researcher should keep notes to know which data links to which respondent. (Ruusuvaori & Nikander, 2017, p. 375.) The data used in this research were anonymised by removing the names of the respondents completely and referring to the answers only with the represented organisations type. This included one exception, all public organisations interviewed in this research are using public authority and public funding, so their organisations are presented in this research through their actual name. This choice was also based on the idea, that the opinions of the public organisations, such as the police, might be important to be presented more openly to increase the validity and the usability of the research results. Still, the names of the interviewees were anonymised even from those organisations. All the private and the third sector organisations were anonymised completely to minimise any risks originating from the competitive or funding sides, allowing them to be more open in their answers.

The reliability factors were also considered in two different ways during the transcription process. First, the transcriptions were conducted by the researcher himself immediately or the following day after each of the interview sessions. Hirsjärvi and Hurme (2008, p. 185) mentions, that a fast transcription after the interview is recommended in terms of quality. Also, using others to do the transcriptions would require training and if the researchers themselves does both the interviews and the transcriptions, it allows better overall quality of transcriptions in general. (Hirsjärvi & Hurme, 2008, p. 185.)

The second reliability factor in the transcriptions and the data analysis was the required translations between Finnish and English language. This need for translations emerged from the English language requirement of the master's thesis report. The interview process was chosen to be conducted in Finnish to minimise the possible difficulties emerging from the use of the English language during the interviews. First, the interview materials, such as invites, and questions were sent to the interviewees in Finnish to minimise the decline rate for the interviews. Secondly, the interviews themselves were also held in Finnish to make the conversation more fluent and to ensure that the interviewees and the interviewer fluently understood all the special professional terminology used during the interviews. This meant that the data collected from these interviews was in Finnish and the master's thesis itself had to be written in English, requiring translations in some stage of the process. When discussing about general literary translations, Hassan (2019, p. 419) claims that different translations should include all the same meanings than the original text, and that there is a risk of an information gap between the original text and the translation if these meanings are not understood during the translation process. To make sure that this possible information gap was as small as possible, all the data processing was done in Finnish and when this was done, the translation was conducted during the writing process of this report. Also, the researcher was familiar with different professional terminology related to security so that the amount of this possible information gap in quotations or other translations was deemed to be rather minimal. This way the translations could be conducted by the researcher minimising again the possible information gap while the researcher had the best knowledge of the data collected and created by himself.

Lastly, the reporting included straight citations from the interviews. Citations can be used to justify researchers' interpretations and those can act as a describing example from the data (Eskola & Suoranta, 1998, p. 127). In this report the citations were presented to justify the researcher's interpretations to readers and to increase the reliability of the results to the readers.

4 MAIN RESULTS AND CONCLUSIONS OF THE RESEARCH

This chapter contains the main results and findings from the research. The first subchapter briefly explains the data gathered during the research. The main results from the research are presented in the following subchapter. The third subchapter presents the discussion of the results and the overall issue. Last subchapter describes the limitations of this research and presents suggestions for future research around this theme.

4.1 Description of the data

The data collected in this research was gathered through expert interviews. A total of eight experts representing their organisations were interviewed. These organisations all operated around the issue of the security of the downtown area. From the public sector the interviewees represented the risk management, safety, security and preparedness team from the Central Administration of the City of Tampere (referred as the City of Tampere during the next subchapter of the main results and findings), the Central Finland Police Department and the Outreach Work from the Social and Health Services of the City of Tampere. Private sector was represented by three private security companies, A, B and C. The third sector was represented by two third sector organisations, A and B, which were both third sector social work organisations conducting for example outreach work in the area. Interviews followed the question framework presented in the appendices chapter.

In addition to the interviews, two of the private security companies released anonymised examples from their statistical data to be used in this research. These are also presented in the main results and findings chapter to support the overall interpretations and discussion.

4.2 Main results and findings

The presentation of the main results and findings in this subchapter follows the thematic structure created during the analysis stage of the research. Following results and

findings are categorised in few main themes, which are also subcategorised in varying subthemes. Main themes are *organisational perceptions of the local security situation*, *current state of organisational intelligence* and *organisational perceptions for the creation of the common situational awareness*.

4.2.1 Organisational perceptions of the local security situation

Organisational perceptions of the local security situation were important to be understood to analyse the possible background factors causing either possibilities or challenges to the creation of the common situational awareness. These perceptions were divided into two themes of *enabling interpretations* and *disabling interpretations*. Enabling interpretations could create coherence or at least allow co-operation between the organisations involved in the process. Disabling interpretations could cause for example cultural clashes or other problems in the co-operation and intelligence sharing.

One of the main findings around the theme of *enabling interpretations* was the shared interpretation of substance abuse and its side effects as one of the main manifestations of the security issues in the downtown area. All interviewed organisations mentioned the substance abuse and its side effects varying from visible drug trade, crime and diverse disorderly conduct as one of the most visible issues in the downtown area.

I think that the number one is related to the substance abuse, which also appeared strongly in the safety questionnaire. So yes, as a cause of insecurity it seems to be the largest one and it involves a multitude of things such as the obvious fear of the intoxicated persons, and in the other hand it creates a variety of risks even to the park staff of the city such as needles lying around... it also causes issues to the entrepreneurs, and then there are these co-occurring disturbances. (The City of Tampere)

While the main issue of substance abuse was shared by everyone, so were many of the individual interpretations of its side effects. For example, the City of Tampere and both third sector organisations recognised that the drug paraphernalia, such as needles, left behind might cause risks to the bystanders or even to the staff of different organisations like mentioned in the previous citation.

The City of Tampere, the Central Finland Police Department, the Outreach Work and all third sector organisations had also recognised the worrying involvement of youths into the drug scene. Especially the mix of youths with the experienced substance abusers were seen as a one major issue which could cause for example increased substance abuse of the youths. Also, some of the ordinary disturbances caused by youths in general were seen to originate from the use of different substances.

All interviewees agreed that this issue has other more visible side effects such as co-occurring crime and general disorderly conduct. Especially property related crime such as thefts were mentioned by the City of Tampere, the Central Finland Police Department, the Outreach Work, the third sector organisation B and all private security companies.

During the [COVID-19 pandemic] we saw that when people are going through a rough patch, shoplifting does not end but those thefts are done more to fulfil their own needs. Whereas after the restrictions, when travelling was enabled and restaurants were opened, it was evident that thefts were again focused on luxury products and those products evidently ends up in these online marketplaces... You need something to finance the substance abuse, something to sell and trade, and that issue is especially visible in the commerce sector. (The private security company B)

Violent behaviour was lifted as one example of this general disorderly conduct especially by the Outreach Work, all third sector organisations, the Central Finland Police Department and all private security companies. While the overall interpretation was generally shared, the perspectives of it varied slightly, but not in a disabling way. The private security companies saw the violence as a threat mostly to their own personnel and staff at their customer locations. The Outreach Work, the Central Finland Police Department and both third sector organisations saw it also as a threat to the substance abusers themselves originating from both internal and external sources.

Also, in relation to these violent crimes there have been observations where traps have been set up to the seller [of narcotics] and to the buyer, where the intention

*has been to try to take over the possessions of the person with the use of violence.
(The Central Finland Police Department)*

However, this issue of violence and other disorderly conduct was not seen to cause substantial objective threat to any bystanders by any of the interviewees. Violence was mainly seen occurring inside the groups of substance abusers to each other, or to the staff of varying organisations like mentioned before. The real threat on the violence side to the bystanders and citizens was mostly seen to be the feeling of insecurity caused by the actions, and just the pure presence of intoxicated people.

[Physical violence] is seen more inside of those groups of substance abusers when there are these showdowns between the people, happening once in a while... I think that most of the showdowns and violence are internally focused so I think that it is very rare that it would be targeted against random bystanders. (The Outreach Work)

The second largest coherent opinion about the issues were the different actions and disturbance caused by the youth. The private security companies A and C, the City of Tampere, the Outreach Work, the third sector organisation A and the Central Finland Police Department recognised young age in general as a source of certain security problems, like general disorderly conduct. In addition to any ordinary bad behaviour, the Central Finland Police Department, the private security companies A and C, the Outreach Work and the City of Tampere also described how the youths' behaviour has changed recently. Different groups were mentioned to be causing increased levels of disturbance in new and intentional ways. This included especially planned group fights originating for example from cultural or personal disputes. This was described especially well by the police.

The youth come together to see each other in public places, which is nothing exceptional, but in addition this involves elements which have caused the police to address this situation differently... the new side of this is that there might be more of this kind of organised or previously planned activity in relation to the themes such as life and limb, and property... we can mention these intentionally planned group fights which have not been so clearly present before... we need to go back

to the nineties to see more of this kind of “skinheads versus rockers -culture”.
(The Central Finland Police Department)

Varying events were also described as one element of the downtown area’s problems or the causes of problems, mentioned by all private security companies and the Central Finland Police Department. The security companies were mostly focused on the issue of ordinary lawful events involving the presence of large amounts of visitors increasing disorderly conduct and crime. The police were more focused on the unlawful side of the event theme, and had recognised that the amount of different protest have been increasing lately requiring preparedness.

Varying protests and the frequency of those have increased a lot in a short time. Just to mention purely as an example, these Convoy-type things against fuel prices or the Extinction Rebellions passive protests, like blocking a street or a part of the city to try to gain attention to their own causes, so, these are the types of the things to which police prepares, I cannot say daily, but multiple times per week. And this war in Ukraine has also activated its own groups. (The Central Finland Police Department)

In general, the overall opinions around the manifestation of the security issues were very similar and common between the participants. There were of course some individual opinions present in the answers of just one or two of the respondents, like for example the recognition of the downtown area’s problems related to the number of licenced restaurants and their intoxicated customers causing problems especially during night-time. This was mentioned by the Central Finland Police Department and the private security company C. However, none of those individual perceptions were conflicting or disabling in relation to the possibilities of an overall co-operation.

The second theme on the enabling side was the interpretations of the general root causes behind these security issues. All respondents saw larger issues behind this problem. A common interpretation to all respondents was the idea that exclusion from the society causes people to act deviance or commit crime. While the general theme of exclusion was shared, there were some variations such as the unemployment as a cause of the

exclusion by the private security company C and the City of Tampere or the homelessness mentioned by both third sector organisations.

One interpretation presented amongst all third sector organisations and the Outreach Work was the issue of multigenerational nature of these individual problems. All public and third sector social work interviewees also emphasised personal experiences as the background factor in many of the problems present in the downtown area, either originating from personal history or even recent incidents.

Of course, the background of an individual, like if the individual has experiences of exclusion and rejection, like if you have experienced something causing traumas or something similar, the threshold and this kind of impulse to do negative actions can be very small.... (The Outreach Work)

In addition, how we treat people in public places, like for example we have been in a park and our customer has been there with us, and a short while later this customer received very harsh treatment, was thrown out from a place or was being yelled like “get the fuck out of here you fucking junkie”. The straight reaction to that is that he/she walks a few hundred meters and releases that aggression to somewhere else. It is always a domino effect. (The third sector organisation A)

One enabling interpretation was also the recognition of the subjective side of the security. All respondents somehow described that some of the security issues might be just subjective feelings instead of an objective insecurity. The City of Tampere and the police representatives mentioned that even though things are going rather well according to the statistics, people are still more and more afraid. Reasons for increased fear were seen to originate from the global events, varying media discussions or even a pure presence of intoxicated people.

All respondents understood that the insecurity, crime and deviance are caused by challenging and varying issues going all the way from the level of society to the personal experiences and background factors. None of these interpretations were conflicting.

When addressing how these interviewees saw their own roles and possibilities to have an influence on the security situation of the downtown area, all interviewees responded in an enabling way. The Central Finland Police Department and the City of Tampere saw that they have the main role in this puzzle. They saw that security is one of the main tasks of municipalities and saw that the police, as the main security authority of the state, have undeniable key responsibility around this theme as well. The Outreach Work and all third sector organisations saw their role being more on the humane and helping side. They described that being present and helping people, as well as transferring knowledge of the problems to the decision makers and to the field for their customers and other stakeholders as well, were their main tasks around this theme.

To some this might be preventive work or harm reduction... We are there occasionally and sometimes something might not be done if we are there. We are not there as security guards, but the presence and this kind of encountering people out there can help someone in that moment and at least someone can get help... If the wellbeing improves, probably so does the security, outwards as well. (The Outreach Work)

Private security organisations described their role as the smallest of these interviewees, being focused to offer security services on business base to those customers willing to pay. However, all recognised that through improving the security of those specific sites they can improve the overall security of the area. In addition, all private security companies recognised that they could have an influence on the overall situation by influencing decision makers and sharing the knowledge they possess to others.

We are purely a commercial operator, and we produce security services to our customers. Our role is to improve our customers security... One way to improve overall security is through improving the security of our customer sites... In a certain way we can have an influence by being in contact to the local decision makers... However, our possibilities are not endless, we try to sell our services actively but not all can buy those as much as they would want to. (The private security company C)

Even though all organisations saw their possibilities to influence the situation differently and especially the private sector mentioned their role as the most limited, these interpretations were not conflicting. As a such, these interpretations were very enabling in a way where all interpretations can be seen as complementary in relation to each other.

However, the interpretations about the best responses and the prevention methods around the security issues varied from enabling to disabling. Ideas on how to address issues such as youths' disorderly conduct and exclusion falls on to the enabling side, while especially the local responses on the substance abuse might be more on the disabling side.

By starting from the enabling interpretations, the interpretations around youths were very similar. The City of Tampere, the third sector organisation A, the Outreach Work, the private security companies A and C and the Central Finland Police Department saw an improved youth work as a good solution to the issues cause by youths. For example, increases in outreach youth work were mentioned by the respondents, as well as a need for low-threshold services such as a youth community centres or even "Walkers-style" youth centres, where youths could be present even while intoxicated. This discussion also included details like when youths reach the legal adulthood they might fall out of the system when some of the services focuses solely on younger people.

The city planning and general situational prevention methods were also recognised by all interviewees. These interpretations varied from traditional lightning schemes and clear and open surroundings to the need for more natural supervision such as opening walking routes to places which are now enclosed. The third sector organisation A even suggested idea that in some cases there could be a need for a local substance abuse plan which would consider all the varying factors in relation to certain problematic area, like a park for example, sharing each responsibility area between relevant participants.

One shared interpretation between all respondents was the need for more official control and the improvement of the way how this official control is implemented. Especially the private security companies, the Outreach Work and all third sector organisations mentioned that the police patrolling and overall resources for example in the

investigative side are notably reduced. The Outreach Work, all third sector organisations and the private security companies A and C also had wishes for the development of the patrolling conducted by the police. For example, the private security company C saw the police foot patrolling being virtually non-existent compared to days of yore. Private security company A mentioned that in those rare times when the police is seen disembarking and moving on foot in the downtown area, it is described to be especially influential to the overall feeling of security. The Outreach Work and all third sector organisations also had perceptions that the form of both the private and the public supervision should be more approachable and the actors should be present in the streets instead of pure interventions.

The police are not present in a way which they used to be, like they could just appear and walk around and just be present... The objective of the police is of course to intervene if something happens and come to stop it or prevent it, but now, I think that it has gone to a state... where the police come always to intervene, and to intervene only... It appears as the police is not a part of the street scene anymore, like they could just be, and you could go and ask them something just for no reason. Like what it was previously, that they could just come and talk and be a part of the community. (The Outreach Work)

As an example of a good approach and co-operation which have appeared in shopping centres is the example of the co-operation between the youth work and security personnel. There are those specifically appointed security stewards which are co-operating with the youth work... In some cases, it does not help if we just throw this person out of the building, so that these security companies have the knowledge on how to approach and how to deal with these people, can you for example guide this person to some other location... It has been good to hear when security personnel have politely guided the people for example to the [local low threshold services centre]. (The third sector organisation A)

This approachable way to conduct security was seen as a good implementation even by the private security companies A and C themselves. Both mentioned that this co-operation with the third sector and the knowledge on how to handle youths with these

specifically trained youth security stewards were seen as a good way to address deeper issues and have more in-depth effect to the situation, even in long term.

This issue also included some *disabling interpretations*. The Central Finland Police Department stated that “a working social policy is the best criminal policy”. This overall idea was shared by every one of the interviewees, but when this issue was discussed at the local level, connotations changed into slightly conflicting. These interpretations on how to address the substance abuse on the local level falls on to the theme of disabling interpretations. Especially the interpretations between social work organisations and security organisations had somewhat conflicting connotations.

The Outreach Work and all third sector organisations emphasised the need for open discussion around the theme of harm reduction. For example, both third sector organisations mentioned that the amount of sharp disposal containers was too low in the city, and in some cases, other organisations had even seen the removal of those as a way to address the overall substance abuse problem.

They were removing the sharp disposal containers from [shopping centre X] when they thought that it would help the problem of substance abuse, but removing the sharp disposal containers does not help at all, and this idea was originated from the security stewards of the shopping centre... If we have a sharp disposal container in the bathroom it creates safety for the other visitors when substance abusers put their needles to the place where they belong instead of leaving them lying around. Sharp disposal containers do not increase the amount use... (The third sector organisation B)

The Outreach Work and both third sector organisations also mentioned that an open discussion around the concept of supervised injection sites, in a way to allow a safe place for substance abusers, might be a good idea. Especially the public bathrooms around the downtown area were described to be unofficial injection sites preventing their normal use. In general, the open discussion and implementation of the harm reduction strategies was strongly wished by these respondents. Some respondents also suggested that there should be more low threshold services and locations for substance abusers in the downtown area. Social sector organisation A suggested that they should

be located with the ideology of desire path, placing these services near where these unofficial gatherings take place. Overall, these official services would allow these people a so-called lawful place where to be instead of loitering in the shopping centres and other places.

It feels like these people are driven away from public places usually by referring to disorderly conduct, but where can you guide them? There should be some kind of a place... Those people are so intensively tried to be removed from public places but then there should be a place where those people can be. Some kind of low threshold centre where you could be while intoxicated and spent time, some kind of more free location without strict supervision. Of course, we have [low threshold services centre X] but it is further away, and it does not reach everyone. (The third sector organisation B)

The opinions around this theme were somewhat opposite on the answers of the traditional security organisations. The Central Finland Police Department approached this issue neutrally, when they strongly stated that they do not take any part in the discussion around municipal policy making, but mentioned that placing certain services on a certain area guides certain people to spent time and gather around that area. Also, inevitably the regular gatherings of substance abusers around certain locations were told to be visible on the street scene and this issue was mentioned be a possible cause of disturbances or decreases in the subjective feeling of security around this kind of an area. The private security companies had more straight forward answers. All three private security companies saw that placing certain services for substance abusers in the downtown area will make the downtown area more insecure. However, they all recognised that those services must be somewhere.

From many mouths we have heard that if those places would be located somewhere else than in the downtown area, it would have a calming effect... if we could move these services somehow away from the downtown area, we could calm the area in many ways... But in a way it is good that those services are near the public transportation, and does it actually remove the problem if we relocate these services, this kind of just moves the problem to a place which have been

peaceful before, so maybe the decentralisation could be the answer. (The private security company A)

For example, if we take these needle exchange locations and housing units of substance abusers, they are of course important from the perspective of social services, but from the side of the security of local residents and others, those also lead these people here. Of course, we can ponder if it is wise to move them away, but if they are in central locations their side effects to the surrounding area are evident, which then affects the security of the commerce and other facets. (The private security service B)

While the statements were moderate, they still included connotations of moving substance abusers away from the downtown area, which is a direct opposite of the opinions from all social work organisations. These kinds of conflicting ideologies can be a cause of cultural clashes in any kind of co-operation. However, like many of the respondents mentioned, increased co-operation and coordination through any kind of an implementation was seen as a good base to open further discussion and create better mutual understanding about these conflicting opinions.

4.2.2 Current state of organisational intelligence

The second main theme addresses the current state of organisational intelligence. This theme includes two subthemes of the *organisational utilisation of intelligence* and the *organisational intelligence*. Reasons to create the intelligence were analysed to understand what level of the common situational awareness could be the most beneficial for each of the organisations at hand. This currently gathered and created intelligence was also analysed to understand what kind of knowledge could be available for the creation of the common situational awareness.

Organisational utilisation of intelligence varied slightly. In general, all organisations utilised intelligence to manage their own operations. Intelligence was used in the tactical, operational, and strategic levels¹.

Starting from the strategic level of intelligence utilisation, most of the respondents mentioned utilising intelligence at the strategic level when they discussed about long term decision-making. The City of Tampere representative described that their use of intelligence is mainly focused on the strategic level decision-making, mentioning the upkeep of the safety and security plan of the City of Tampere as one of their team's number one task.

The Outreach Work and both third sector organisations also recognised that they plan and participate in strategic decision-making in varying ways, such as planning of the improvement of social work in general. The third sector organisations also mentioned this kind of intelligence use being important, when their operations are often project-type schemes lasting few years, and the project planning allowing the funding for their operations must be adequate and in this way future-oriented.

The private security companies A and B recognised long term planning more through a business perspective. The private security company A focused on their own operations when mentioning that they use long term planning to develop new security products and business ideas. Both private security companies A and B discussed that they plan for example their own security operations in long term perspective, especially in relation to the changing environment, mentioning the development of the city around their customer sites as an example.

The Central Finland Police Department mentioned that they use intelligence in strategic planning and decision-making at higher levels when planning for example the execution of overall police tasks or financial issues, and to see the long-term efficiency of their operations. In relation to this theme of the downtown area of the city of Tampere, they

¹ Interviewee from the Central Finland Police Department used the terms of *operational* and *tactical* in the answers, but in an opposite way how Ratcliffe (2007a; 2011) described them. These terms in the description of the answers of the Central Finland Police Department are changed to follow Ratcliffe's terminology to make the results compatible.

however answered that “the security of the downtown area of the city of Tampere is just a small sector of the overall picture, so the strategic analysis cannot focus on just the downtown area”.

Operational level of the intelligence utilisation was especially emphasised in the answers of the Central Finland Police Department, the Outreach Work, the third sector organisations and all private security companies. Coordinating resources and planning different operations was mentioned to be the primary use of this type of intelligence. While the City of Tampere was mainly focused on the strategical level, they use intelligence in the operational level as well. This happens more in different network-type co-operative schemes and when coordinating resources and actions based on certain knowledge received.

If we hear that there is something going on in some certain area, we generally spent more time in that area. Like if we hear that there is something going on in the downtown area, we can bring this information forth and focus whatever is required to that area. (The Outreach Work)

All private security companies also described that this level of intelligence is used in the planning of work safety, even at the level of daily management. Especially, trends in threatening or violent situations were mentioned to be followed so that resources can be coordinated, and different work safety planning can be conducted.

The clearest examples of tactical level intelligence use were from the Central Finland Police Department, the Outreach Work and the third sector organisations. Especially the police emphasised the tactical level as equally important as the operational level in relation to their tasks around the theme of this research. Different security issues were mentioned to be originating from individuals and this kind of tactical use of intelligence was in this relation emphasised as very important for their effective operations. Social work organisations also recognised that they use intelligence in tactical levels especially when discussing on the approaches in their field work or even when the Outreach Work mentioned an example of addressing actions of a certain youth group causing trouble.

While the intelligence was used in all levels as a tool of decision-making, the reasons for gathering and creating intelligence based also on varying agreements and legislation. All private security companies mentioned that one of the main reasons they create intelligence at the current scale is, because the private security services act obligates them to do so, and as such to report their actions in specific detail. Also, the third sector organisation B mentioned that they have certain agreements which obligates them to report certain matters to certain stakeholders.

The side of existentialism was emphasised in the answers of the private security companies and the third sector organisations. The third sector organisations focused on their organisational forms and emphasised that certain intelligence must be created and reported to certain facets to get funding for the projects themselves. The private security companies also mentioned that in addition to the law and utilisation in internal decision-making, one of the biggest reasons to create intelligence is to prove that they are necessary and efficient in their actions to the customer paying for the service.

It is the [proof] of our actions in a sense that the customer feels that our presence is necessary. If we do not report in sufficient detail some external facet inside of the customers organisation, for example from the financial administration, could state that let's do a cut on the expenses and remove the security services because according to these reports they are not doing anything. (The private security company C)

Organisational intelligence included variety of personal data from the customers, written incident descriptions, broad variety of statistics, knowledge gathered by observations and experience, all the way to more purposeful and detailed professional intelligence products. All interviewed organisation gathered and created intelligence in some way. While some of the intelligence these organisations create is highly confidential based on agreements, trust or legislation, there were a great amount of intelligence which is possible to be shared between companions or even publicly.

The Central Finland Police Department, the Outreach Work, the City of Tampere and both third sector organisations emphasised the participation in varying networks as a source of knowledge. Mainly the knowledge received from the participation from those

networks was phenomena type knowledge of current trends varying from local and regional level to national level. Also, different organisational statistics were shared in some of the networks.

The Outreach Work, the third sector organisations and the private security companies mentioned that they possess a wide amount of intelligence from doing observations in the field. While the Central Finland Police Department politely declined to speak about their intelligence gathering processes in detail, it is fairly safe to presume that the police also have intelligence based on observations from the field. The Outreach Work and both third sector organisations recognised that they possess a great amount of potentially very beneficial and detailed intelligence gathered from their field work and encounters with their customers.

Of course, we also observe those phenomena happening in the streets or in the drug scene. We are pretty much on the grass roots level out there, and that puts us in a very good position where the customers speak to us very openly and tells us what is going on in their lives and what is going on in the drug scene... (The third sector organisation B)

These observations varied from pure observations and expert opinions to detailed discussions with the people on the streets. Knowledge gathered from these observations were mentioned to be very comprehensive including matters such as the amount and type of the people in the area, type of drugs currently presented in the street scene, atmosphere and the restlessness of the area, all the way to a multitude of other knowledge which is possible to be gathered by observations and trust based confidential human interactions. Also, the private security company A emphasised their hidden knowledge from their field experiences and observations. By analysing the answers from all private security companies this kind of information was possessed by them all and they all saw it to be possibly beneficial for others as well.

In my personal experience the police are very rarely present especially at those sites where we have security stewards², and the thing is that there is so much valuable hidden information about the locations itself or those people who are responsible for the disturbances out there... (The private security company A)

The City of Tampere, the Central Finland Police Department and all private security companies also conducted specific analysis to create varying professional intelligence products. The police mentioned that they conduct a variety of intelligence analysis in the tactical, operational, and strategic levels. However, in relation to the scope of this research only the first two were mentioned to be suitable and relevant levels. The City of Tampere discussed about different plans such as the city's safety and security plan, which contains a variety of analysed data in addition to other specific intelligence products, like reports purposefully created to support the decision makers on their requests. The private security companies discussed how they analyse and create specific products for certain customers based on different agreements. These products were mentioned to contain varying analysis like for example an areal intelligence and current crime trends, such as the example on the citation mentioned on previous subchapter about the purpose of shoplifting based on the type of products stolen from the stores.

All respondents, except the third sector organisation A, mentioned to collect different statistics from their operations. The City of Tampere collects statistics from their companions as well as from varying surveys, such as the safety or wellbeing questionnaires of the city. The Outreach Work and the third sector organisation B collects statistics from the amount and type of their customer encounters to more specific statistics on the services produced and used by their customers as well as other work task related statistics. These statistics included for example knowledge on the estimated age and sex of the customers, number of clean injection devices shared, statistics on the services where the customers have been guided and varying health related statistics.

² According to the private security services act (1085/2015) *security stewards* can be placed to assist the police or the border guard on the upkeep of order and security in certain public places such as shopping centres or public transport stations.

Purely security related incident statistics were directly collected by all private security companies and the Central Finland Police Department. The police representative mentioned that they collect statistics related to crime such as what, when and where incidents happens and by who. According to the interview this knowledge can be limited to a certain location and a time frame if necessary, making these statistics very precise. By assessing public sources of the police, this statistical knowledge related to crime is very detailed in a way where even varying specific crime types can be separated (Police of Finland, 2022). And later in the paper the Figure 8 shows a good example of the detail of the knowledge available from these statistics. Also, two of the private security companies released anonymised and cropped examples of the security related statistics they collect. These examples are presented in the Tables 1 and 2 below.

TABLE 1. Statistics example one from a private security company

<i>Type of incident and actions by security stewards</i>	<i>Amount of incidents / October 2021</i>
<i>Detainments of persons</i>	9
<i>Removals of persons from the premises</i>	43
<i>Notifications to persons on their behavior</i>	97
<i>Monitoring suspicious persons</i>	1
<i>Other task related to maintaining order</i>	2
<i>Use of force</i>	2
<i>Assisting the police</i>	2
<i>Assisting the emergency services (paramedics)</i>	5
<i>Disorderly conduct</i>	94
<i>Disorderly conduct by the youth</i>	39

TABLE 2. Statistics example two from a private security company

<i>Type of incidents</i>	<i>Amount of incidents / October 2021</i>
<i>Disorderly conduct</i>	36
<i>Attempted fraud</i>	1
<i>Fraud</i>	0
<i>Threats</i>	8
<i>Malicious damage</i>	1
<i>Attempted shoplifting or theft</i>	3
<i>Shoplifting or theft</i>	13
<i>Grand total</i>	62

These statistics shown on the Tables 1 and 2 are from two individual customer locations in the downtown area of the city of Tampere. Both sites have manned security presence, meaning that there are constant security personnel at the site making observations, conducting actions, and reporting them in relation to their area of responsibility. These examples were cropped to include only the security related statistics. In addition, these companies gather a variety of other statistics as well varying from tasks related to first aid and accidents to different customer service tasks, guidance and assistance of personnel, statistics on lost and found items, and property upkeep related sightings and tasks. As seen from the examples, the private security companies collect very detailed local knowledge about the security and the overall situation of their customer locations.

In relation to this theme, the private security companies A and C described, how they have a broad number of varying regional statistics gathered and used for example in their production planning. For example, number of security alarms or guard-calls were mentioned to be available in varying levels such as between separate cities or even between separate parts of a city.

To address the timeliness of this knowledge, all statistics collected by the private security companies, the Outreach Work, the third sector organisation B and the Central Finland Police Department were almost constantly available on real-time. For example, each of the private security companies, the Outreach Work and the third sector organisation B mentioned that their reports are inputted to their individual technical

systems, if not on real-time by the automation or the personnel themselves, then at least immediately after incidents or during the same work shift. However, the City of Tampere's questionnaires, the companion statistics collected by some respondents, as well as all different network-related knowledge gathering was described to be more delayed, varying from network meetings a few times in a month to questionnaires conducted in a frequency of two or three years.

In all cases, the interviewees mentioned that at least a phenomena-level knowledge and observations gathered by the staff of the organisations are available in a swift manner if needed. Especially, the Outreach Work and the third sector organisations emphasised that they have varying debriefings and meetings in high frequency to keep all their staff constantly up to date in relation to phenomena level knowledge and trends. They also mentioned to be part in varying messaging groups where any needed knowledge is shared in real time. The private security companies also described that they share knowledge between sites and even on the regional level with bulletins and other communicative tools.

To address the availability of the organisational intelligence it is crucial to note that for example some of the knowledge gathered by the organisations are either confidential by the law or by varying agreements, or they fall under commercial secrets. All social work interviewees strongly highlighted the fact that any knowledge on individuals and their personal data such as health, any incriminating statements or anything which could risk the trust and confidentiality between their field workers and their customers, are strictly confidential and will not be shared. The private security companies emphasised that in some cases individual statistics from certain customer site cannot be shared unless the customer gives a permission to do so. Also, some of the format of the reporting and for example some of the types of incidents they report outside of the security theme, might be held hidden to allow competitive edge. The Central Finland Police Department mentioned that some of the knowledge they possess is strictly confidential by the law.

While some of the knowledge is confidential and will not be shared by these respondents, every one of the interviewees agreed that the phenomena level knowledge can be shared very openly without many problems. And, in some cases, the phenomena level knowledge was already shared openly. All statistics by the private security

companies related strictly to security incidents were not seen to cause any commercial conflicts or fall under any legal barriers, if the written more detailed incidents reports are kept out. The police and social service respondents also mentioned that phenomena level intelligence is available for sharing without any legal obstacles, and even most of the statistics can be shared if the method is suitable for all, and possible risks are pre-examined and addressed. As a conclusion, none of the interviewees saw any actual obstacles if the common situational awareness stays on the phenomena level or if the detailed statistics are purely security related, and the concept is otherwise mutually agreed and suitable for each participant.

4.2.3 Organisational perceptions for the creation of the common situational awareness

The last main theme focuses on the perceptions related to the creation of the common situational awareness. The first subtheme addresses the *interpretations on the implementation* of this kind of common situational awareness to understand more about the implementation which would be the most suitable for the respondents. After that the two following themes focuses on the *fears and interpretations of possible risks or deficiencies* these respondents saw in the creation of the common situational awareness and the *interpretations of the benefits of the common situational awareness*.

Interpretations on the implementation can be started from the resource question.

Interpretations on the responsibility to launch this kind of common situational awareness were divided between the City of Tampere, the police and a certain group or project -style implementation.

The Outreach Work, the City of Tampere, the Central Finland Police Department, the third sector organisation B and the private security companies B and C mentioned that the implementation and resources should originate from the City of Tampere. This was justified by mentioning that it is the task of the city, security is part of the strategy of the city, the city has the best possibilities to launch this kind of co-operation and the biggest benefactor would be the city itself. Also, the third sector organisation B and the Outreach Work mentioned the city being the best actor in the terms of neutrality if the implementation is an organisation-led.

The police were suggested by the City of Tampere and the private security company B, especially if the common situational awareness work would be on the operational level instead of the strategic level, and if it would be focused on crime related security issues. Also, the Outreach Work mentioned that the police would be the third-best responsible actor after the city itself or a project-type implementation, purely, because it is also a publicly funded authority and should be a roughly neutral actor in that sense. Especially, the private sector was seen as a suspicious leader by the third sector organisation B and the Outreach Work in the terms of the true background ideologies. Private sector actions were seen to be always based on business and making money, so in this sense the private sector was seen as a suspicious leader of the network or the collector of the overall intelligence. However, at the same time it was seen as an indispensable companion in the process of developing the security and solving these issues.

All third sector organisations, the Outreach Work and the private security company B mentioned that this kind of a neutral project-type implementation would be suitable as well. Both third sector organisations emphasised this kind of an equal implementation method as the best. This way the common situational awareness could be created openly, and the results would consider all varying opinions when the interpretation of the common situational awareness would be conducted mutually in an equal group.

Could it be this kind of a project, or work group? ... It would be great if it would be this kind of an equal network in a sense that it would not be anyone's individual agenda. Maybe implemented through this kind of an attitude that each member joins it with certain humbleness like now we are trying to find out new ways to do this thing and now we listen to each other, because there is always that risk that if we start to follow the way of one individual organisation, then the others feel pressured, and no-one enjoys. And that situation has been experienced multiple times before... (The third sector organisation A)

The type of the implementation of the common situational awareness was separated to a more network-type implementation and a more technical solution. All respondents were open to join the network-type implementation. Especially, the third sector organisations saw the network-type implementation as the best especially when their work is already highly dependent on participation in different networks. The private security company

A emphasised that this kind of a network-type implementation would be the best specifically in the terms of forming more fluent and permanent connections between organisations and their representatives, which could benefit other work and co-operation as well. A network implementation was also seen important in addition to the pure technical implementation, in a way that the common situational awareness could be interpreted in a mutual co-operation in this kind of a forum, and the interpretation would include the voice of all the actors. This kind of a network-type implementation was also seen as a good way to coordinate and decide what to do to the results achieved with the common situational awareness, as well as the follow-up of their effectiveness.

The City of Tampere, the third sector organisation A and the private security companies B and C were the most open to a more technical solution such as some kind of an application-based creation of the common situational awareness. This idea would include for example feeding the individual organisational intelligence, like statistics to a certain technical system, which then would allow a common situational awareness of the downtown area to all members through for example a visual presentation, like a map screen presenting the results in an easily interpretable way.

However, this method was also seen as the most problematic to implement. Especially, private security company A saw this implementation as problematic and were suspicious of how this could be implemented, how these varying separate systems could communicate between each other, how expensive this kind of a mutual information system would be and who would pay for the time what is used to feed the organisational intelligence to this kind of a system? While the third sector organisation B was not as critical, it also mentioned that this and any other kind of implementation requires time and effort for it to be truly useful and beneficial. It was also mentioned that if this idea will be implemented, it cannot be implemented by cutting corners. The Central Finland Police Department also mentioned, that whatever is the actual style of the implementation, some internal coordination might be required to be able to participate in this kind of work with the required effort, especially when they are already part of so many other networks and projects.

The participants joining this kind of common situational awareness work were also discussed by the interviewees. Especially the Central Finland Police Department, the

private security company B and the Outreach Work mentioned that in a network-type of an implementation the members of the network or the members interpreting the results of any kind of an implementation should be high ranking members of the organisations. This way the results of the common situational awareness would lead to concrete actions and responses. In relation to the technical implementation some of the interviewees saw that at least in the beginning it might be better if the availability of the common situational awareness would be based on an invitation, instead of it being completely public and open for all. However, like mentioned later in the text, the concept of the downtown area of the city of Tampere was not seen as so problematic even if some of this knowledge would be completely public, and if the created intelligence would be on phenomena and statistical levels.

This discussion also included connotations on the goals of this kind of common situational awareness work. Without any purpose, the creation of the common situational awareness might be pointless, like described by the Outreach Work when discussing about the possible implementation. Also, the private security company C emphasised that the responsibility to participate should not be personal, but more a work position or an agreement based, so that the long-term goals could be achieved. The efforts to upkeep this kind of common situational awareness work and coordination was also seen to be at more risk if the implementation would lie on a personal enthusiasm of an individuals.

It might be left to this kind of nice to know -stage, so I thought that it should be built in this kind of gradual way so that the knowledge would end up to the decision-making level and they could think about it... it could be like everyone is doing it and we might have like one meeting per week, but it is left to that, the knowledge is not further utilised... (The Outreach Work)

The need for this kind of co-operation exists, whether it is conducted in a forum or through some kind of a technical solution. But previously it has been this kind of a seasonal work where occasionally some enthusiastic person who has felt that this is important, has been appointed to a certain position, but then the organisation chance and the next person is appointed to that position who does not have the

same enthusiasm about it or who does not have enough time to do it... (The private security company C)

Fears and interpretations of possible risks or deficiencies of the creation of the common situational awareness were focused on few common conclusions. Those were the segregation of the city, the spreading of dis- or misinformation, the willingness of the participants to share relevant information between each other and the attitudes between the participants.

The City of Tampere, the Central Finland Police Department, the Outreach Work, the third sector organisation B and the private security company A mentioned that this kind of a common situational awareness of the problems in separate areas could pose a risk of the segregation of some parts of the city. This was highlighted especially if this kind of common situational awareness would leak or become public in other ways, and if it would include city wide data.

And then we may come to this kind of areal segregation which we try to avoid as much as possible. We refuse to share this information that some specific area has these certain issues even though the people might already know it, but it could have, if we talk about radical examples, influence on the housing prices for example... (The City of Tampere)

On the contrary, these same interviewees mentioned that in relation to the theme of this research it might not be a problem at all. The downtown area itself was mentioned to be in this sense a specific location in contrast to the other residential areas of the city by the City of Tampere and the Central Finland Police Department. This idea meant that these downtown areas could be assessed independently and separately from other areas.

If we think out loud... Especially when the common interest is higher and there are more assets to be protected which means that varying activities can pose more threat to the city or to the state, so then collection of the knowledge and sharing the knowledge should be conducted on a lower threshold... And the police have already considered this area in the terms of resources because the amount of police tasks focuses on that area, so also in those terms this idea could be

justified... It might be assessed as a special surrounding and in this case, this could be realised in a more open knowledge sharing... (The Central Finland Police Department)

Dis- and misinformation in varying ways were discussed by the City of Tampere, the third sector organisations, the Outreach Work, the private security company B, and the Central Finland Police Department. So-called yellow press, social media and the discussions and reactions by local population were seen problematic if this kind of situational awareness would be made public. Participants feared that the statistics and the areal knowledge on varying problems could be presented in a way where they would be distorted to prove only negative opinions from the issues and to cause public outcry resulting in varying other problems. However, a common situational awareness based on facts was also seen a possible way to debunk these distorted discussions and images by the private security company B. The third sector organisations and the Outreach Work also emphasised that their role in knowledge sharing should be understood in relation to the nature of their field work. The Outreach Work described that in addition to the media issue, for example police officers or security personnel mentioning that an outreach worker shared this information with us, to people on the streets, was seen very problematic in relation to the upkeep of trust with their own customers.

Those statistics could be wanted to be interpreted intentionally wrong, like what is my goal, that's what I can prove with those statistics. We can state that this is how this thing is, and we can find explanations to negative phenomena from a certain part of the city, for example by saying that that is a problematic area because of the ethnicity of the residents, because a certain socioeconomical population resides there and that is the reason for these problems, and the old truth of lies, damned lies and statistics... so yes, we can create any kind of statistics we want and with those numbers we can distort the truth even just with the numbers. (The Central Finland Police Department)

First, I think about the media. It has something to do with the positive security related communications, and the media has evidently both sides of the issue. We saw that on the release of the results from the safety questionnaire that certain media clearly searched for those parts which were negative and wrote about

those, like this is how many people are afraid, and at the same time some other media outlet wrote that overall things are actually pretty well. So, the issue of the media might be a double-edged sword. (The City of Tampere)

The last common fears or interpretations of a risks or deficiencies were focused on the implementation of the common situational awareness itself. The City of Tampere and all private security companies were worried about organisational enthusiasm to share information. Also, all private security companies and both third sector organisations were worried about organisational attitudes towards each other in this kind of a group effort.

The City of Tampere and all private security companies were mostly worried about competitive side of the issue. They discussed that competitive side of the security business could stand in a way of a fluent knowledge sharing. However, like discussed previously, all private security companies agreed that phenomena level discussions or purely security related statistics like the amount of disorderly conduct or the amount of varying crime etc. would not cause any issues on the competitive side. The problems were seen to be located more on the sales side of the business or the hidden organisational competitive edges, like specific reporting tools, analysis methods or prices for example.

I would like to see that the companies would co-operate and break some walls in a way that everything would not be seen as a threat. Instead, we could recognise that hey we have this kind of a problem in this area, and we should try to solve it together, even if it would have a slight conflict of interest between competitors. That we could find some common grounds as well and that it would not be just a so-called tennis match between each other, throwing problems back and forth between each other. (The private security company A)

The third sector organisations were somewhat worried about the attitudes of the private security companies in relation to the co-operation. They discussed about previous experiences of their field staff which could cause a lack of interest to participate in any co-operation. While these answers were focused on the conduct of the staff of the

security companies, not on to the organisations themselves, it was still clearly causing suspicion at the organisational level as well.

But then there are some other companies which treats our people like trash. At the worst our workers have been discussing with our customer and suddenly guards hauled that person out from the building from the front of our faces, just because you can't be on that hallway... so with this kind of people or the companies they represent, one could feel a little reluctant on being very helpful and sharing information with them... (The third sector organisation B)

All private security companies focused their suspicion to the police and its possible attitudes. All companies were sceptical on the amount of knowledge the police would share with them. This knowledge related scepticism was also shared by all other respondents expect the police itself. The private security companies A and C also mentioned that the police could be jealous of their own knowledge in a way where they either would not believe the knowledge gathered by the private security companies if it would represent a different kind of a truth, or then the police would not want to share their own knowledge to benefit their private competitors. All companies mentioned that the co-operation and any kind of connection between the police and the companies have been rather minimal or even non-existent in the recent years, even if there has been a want to co-operate more from the side of the private security companies. This of course could be one source for the notable scepticism towards the police.

For example, the police have traditionally felt some kind of jealousy through the police organisations in a way where the private security industry have been seen kind of eaten their tasks. And now when there have been some discussions around reducing the amount of police officers, there could be a big possibility that either our role would be underestimated, or some of the information would be concealed if they would feel that their role would be in jeopardy. (The private security company C)

What kind of an information these authorities can really give to us? Because they cannot give everything to us so would it really benefit us in any way? I see this in an opposite way where our information would benefit them, but would it cause

this kind of a situation where the police would state that this data of yours cannot be correct, because we are doing our job... (The private security company A)

Interpretations of the benefits of the common situational awareness included a multitude of discussions which perceived some of the previous issues also as possibilities. The previous suspicions around the attitudes of the organisations were lifted as one of the biggest benefits of this kind of common co-operation and knowledge sharing. Also, all organisations recognised the importance of sharing their own intelligence and well as the value of the intelligence others might have.

To start from the expected benefits towards others, all respondents recognised that the common situational awareness and sharing their own knowledge about the situation could benefit general strategic work for the future of the city. The general development of the city in varying fields and its policies and plans were lifted as a one major benefit of the common multisectoral situational awareness. Sharing fact-based knowledge of true security situation was idealised to guide better decision-making of the whole city leadership in general. It was also seen as a guide for better resource implementation related to the theme. The Central Finland Police Department, the third sector organisation A and the City of Tampere recognised that the common situational awareness could also be especially beneficial source of relevant intelligence when organisations, such as the city, are updating their individual safety and security plans. The private security companies and the third sector organisations emphasised that this kind of work would also allow the voice of varying organisations to be heard better in relation to general decision-making and planning work of the organisations and the city, or even in relation to the higher levels of decision-making through unifying the voices of local actors. The third sector organisation A also saw that this kind of knowledge could allow even more efficient community work.

This kind of common situational awareness was also seen to complement organisational intelligence of other participants. For example, the data collected by private security companies were thought to possibly complement the crime data gathered by the police, by the City of Tampere and the Central Finland Police Department itself. This interpretation was confirmed by the answers of all private security companies when they

all mentioned that they possess a broad amount of crime information which never ends up to the police or other authorities.

Sharing knowledge to the authorities might improve the understanding about the issues we are dealing with on weekly or even on daily basis. What I have said multiple times is that a site which is very problematic to us might appear to be very calm to the police, because we do our job so well that the police does not receive a lot of calls from there, which then might distort the image to the police because in their own statistics that site does not have any issues... (The private security company A)

This would allow the police to be able to follow the trends, because we do a lot of sightings about varying disturbance, vandalism and burglaries which are not appearing in the same light to the police. There are a lot of customers which are tired to make reports to the police because their site is being for example vandalised so often... they just paint their walls over and over again and the authorities never know anything about it. (The private security company C)

In addition, the issue of the lack of police resources was emphasised in relation to the possible benefits by all private security companies. The common situational awareness would allow the police and even top decision makers to see things from different perspective for example in relation to the reasons why crime is being left unreported. This mutual understanding between the police and the private security companies were even expected to support the police in its efforts to get more funding in the operational police work.

We have experienced that in many cases when we report something the comment from the police is that you deal with it, or that they cannot come. This, kind of how you could say it, raises the bar to report stuff to the police. Of course, we have emphasised that report with low threshold, but if the police does not react or arrive in reasonable time it could end up in a situation where this information does not end to the police at all. (The private security company A)

The wish is that the amount of law enforcement resources would not be cut. The commerce sector is facing a huge amount of decision of waiving prosecutions and in some cases that breaks the belief of the shopkeepers that you need to report crime to the police. Police investigates, but if the queues are huge and those just ends to decisions to waive prosecution even if the prosecution is clearly well-grounded, so yes, I would see it necessary to increase their overall resources.
(The private security company B)

A possibility to influence on the local level attitudes was also lifted as one of the biggest possibilities by the Outreach Work and all third sector organisations. All previous respondents recognised that any kind of mutual knowledge sharing would create a better pathway to discuss and analyse effective approaches to the security problems. Actions of the private security companies were also discussed by these interviewees. Especially any network-type implementation was seen as an opportunity to affect to the organisational culture of those companies, meaning the way how they conduct their field security work. All social work respondents also saw that through a better co-operation they could include more humane connotations to the discussions around the problems of for example the substance abuse. Especially the idea that substance abusers are also humans were emphasised in those answers instead of seeing them just as a security issue. This issue was also discussed through the idea that better knowledge sharing would allow better coordination and understanding of mutual roles and responsibilities, which then would result in all participants to give certain peace of work to other organisations. This discussion around the side-effects of the common situational awareness was the reason why these facets emphasised that if the implementation is a technical solution, some kind of a network-type forum should be created to support it, to allow these advanced benefits and possibilities.

Some kind of an information on how to encounter people, that could be something which could benefit the security operators, to understand how to approach people. The end goal is the same, we all try to prevent bad things from happening... One should look at this issue from a different perspective, how to have a real influence, like when you put people on cuffs and carry them away, then they are back after an hour... (The Outreach Work)

For example, we had this kind of a deal with the police that they did not post on the front of our [service location X]. They could catch all kinds of people from there, but they gave us this certain peace of work because they saw the importance of this kind of health work, and that it is important for our customers to get there. It was this kind of mutual respect and knowledge sharing. (The third sector organisation B)

The respondents also saw a lot of benefits to themselves. Varying operational improvements were highlighted in all answers. All respondents saw that if their individual situational awareness is more precise through including more sources and companions as the sources of the intelligence, it would make their own resource coordination better. The third sector organisation A emphasised that the common situational awareness would also allow varying facets to focus their scarce resources more efficiently, when they would know what is happening and where, and who is already working there.

All third sector organisations and the private security companies also saw the common situational awareness as a tool of work safety and organisational preparedness. They saw that they could prepare for possible approaching threats or risks, in addition to the pure resource management related to the changing environment, if they would have a better knowledge related to those. This side was also emphasised in the answers of the private security companies. They all mentioned that now they are mainly dependant on their internal intelligence creation, and any kind of common situational awareness would benefit that process a lot. All of them mentioned that this kind of knowledge would also be used to create better products and security related services, and also to bring improved knowledge to the customer. They saw that while this of course improves their business possibilities, it would also benefit the overall security situation when they could improve the security of their customers. This theme was also seen in a way of a reward to them. Meaning that when they use their own resources to participate in the common situational awareness work, and share knowledge to others, they could then receive these kinds of benefits in the form of improved possibilities in return from this investment. Especially the security companies B and C mentioned, that this idea of received benefits would encourage their participation even if it would require some investments of resources from them

This issue was also discussed through the planning and reviewing stages of the organisational actions. The Central Finland Police Department wished for future where their actions would not be mostly reactive, but they could use this kind of common situational awareness in more proactive way. This would allow them to focus on the developing problems before they become large issues. On the other hand, the police and the City of Tampere saw that through the common situational awareness, the true efficiency of their own actions could be measured with better accuracy and reliability.

4.3 Discussion

This subchapter presents the main discussion related to the results and the overall theme of the study. The discussion in the following subchapters delves into the meaning and interpretation of the implementation of the common situational awareness, its role related to the overall field of security governance and to the theme of security addressed in this research.

4.3.1 Practical views on the implementation of the common situational awareness

From the results one could see that the possibilities for the creation of the common situational awareness are much greater than the challenges in front of it. While the overall atmosphere of the results can be seen to be more positive than negative, the suitable implementation of the common situational awareness is crucial for it to end up in a success. This subchapter includes the discussion on the practical implementation of the common situational awareness.

Ideas around the possible type and the utilisation of the common situational awareness were roughly divided into two main suggestions in the answers. To picture these wishes or needs through the Ratcliffe's (2007a; 2011) conceptualisation of the levels of intelligence, the context where it was seen needed in relation to organisational decision-making were mainly the operational and the strategic levels. The method of implementation discussed by the interviewees can also be roughly shared to a network-implementation and a technical solution. Or like Dupont's (2004, p. 78) models of the security networks are described, to the local security network and to the informational network.

While there were discussions about the unsuitability of certain levels of implementation, Christopher (2007, p. 186) refers to McDowell (1998) when he mentions that a strategy is just a development and realisation of a structured plan. This interpretation shows that even broader strategic level intelligence processes could be equally suitable to be implemented at the local level, in addition to the traditional view where it is seen mostly used around a high-level agenda (Christopher, 2007, p. 186). This discussion supports the overall wishes of the respondents where the situational awareness was wished to be implemented as a strategic tool as well as an operational tool. The strategical analysis and implementation should just be conducted as a local level strategy. Christopher (2007, pp. 186–187) describes how the relevance of the strategical implementation and phenomena considered should be chosen by the actors themselves. He uses an example of the international drug crime as a phenomenon, which might be completely irrelevant to local level operators. Therefore, the implementation of strategy should be a symbiotic process moving from top-down to vice versa in an organisation. (Christopher, 2007, pp. 186–187.) If this concept of the situational awareness is implemented, it should be allowed to be formed in a flexible way, where the phenomena selected to be focused should follow the issues which are relevant to all participants.

By assessing the previous discussions in the theoretical background chapter, the largest practical difference between these two levels of implementation is the timeliness of the required information or intelligence. If the implementation would be focused on the strategic level, the necessary knowledge sharing between participants would not be required to be as real-time as in the operational level. In this kind of an implementation, the common situational awareness could be implemented purely through creating a local security network. There participants could share and create intelligence even without any specific need for common technical applications. Varying organisational intelligence could be joined together to form the common situational awareness through interactions of the participants. Then the participants or the facilitator of the network could form a presentation of this common situational awareness in any form they choose to. The local security network -based common situational awareness would also allow almost any type of organisational intelligence to be inputted into it. This intelligence could be shared and analysed together through mutual communication. This would mean that any separate organisational intelligence would not be required to be in

any specific form or type. In this way the varying phenomena and observation -based intelligence could also be shared and interpreted with ease.

While the local security network -based common situational awareness might be easier to be implemented than technical application, it is not a completely problem free either. Whelan's (2016) findings in his research were clearly present in the answers of this research as well. For example, the organisational relationships were seen to be a one possible cause of the problems in any kind of co-operation. Even bad experiences between the street level staff of separate organisations were mentioned to cause a possible lack of trust in the co-operation even at the organisational level. Not to mention varying organisational attitudes, cultures and *modi operandi*. But, while the local security network -based common situational awareness has issues, it was still the preferred implementation method by most of the respondents. Mainly, because this implementation would eventually give them more than just one new intelligence product.

In contrast to this, if the common situational awareness is targeted to improve mainly the operational level decision-making, the required implementation method needs to be conducted on a more real-time manner. This kind of operational level common situational awareness would require very frequent and fluent communication within the local security network. Optionally, it could be conducted as, or supported with the establishment of the informational network. With fluent technical implementation the common situational awareness would be available to all participants on real-time, without the need of any gatherings or other frequent human interaction.

However, to create the informational network as a technical application, the facet implementing it will face some notable challenges. Some of the respondents had suspicions closely related to Whelan's (2016) findings in his research around the technology of the security networks. Especially, the problem of varying organisational systems and their disability to communicate was seen as a major challenge in relation to the discussions around the technical implementation. To create an automatic system which would allow a real-time common situational awareness, and as a such to be compatible and linked with varying independent systems used in the public, private and third sector could be extremely expensive. It could even end up being impossible to be

established due varying organisational preconditions, legal challenges and technical issues. This leads to a situation where at least some of the varying organisational intelligence should be manually gathered or inputted by the participants or the facilitators themselves. This would lead to the question presented in the interviews. Who would pay for the time and resources required to gather and input the data in the organisational level?

If these issues are solved or bypassed, the creation and the upkeep of a common situational awareness even as a technical implementation could be possible at least according to the results related to the organisational intelligence. Varying facets gathers broad amounts of statistics from their individual observations and actions. In some cases, these statistics could be directly compatible with other similar actors, even without any modifying. For example, the crime and disturbance data collected by the police and by the private security companies could be gathered and presented even in this kind of way presented in the Figure 7, on the next page. Sheptycki and Ratcliffe (2007, p. 199) mentions, how the spatio-temporal data could be used especially in operational work such as resource coordination and varying intelligence-led law enforcement processes. Most of these previously mentioned statistics included the spatio-temporal features of where and when. Also, they were in many cases very detailed on the feature of what. It means that this intelligence could offer a very suitable starting point for the common situational awareness about the concrete manifestations of the objective and measurable side of the security problems. This intelligence could be then especially useful around the operational decision-making processes. Like seen from the Figure 8 presented later in the text, some organisations already use their individual organisational intelligence in this way.

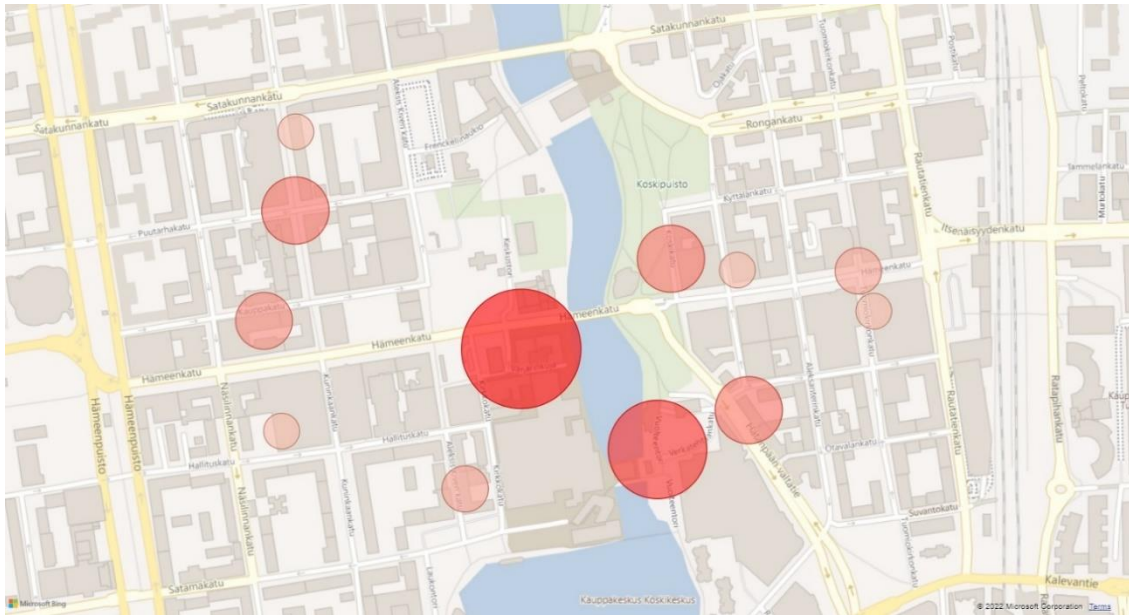


FIGURE 7. An example of random visualisation created with Microsoft Power BI - application.

In addition to the pure technical implementation, varying technical applications could be used to support the traditional network-type implementation at any level of decision-making. For example, as seen in the Figure 7, visualisation of the statistical data with varying applications could allow a very approachable way to analyse and present the spatio-temporal features in addition to the type of the incidents. If the implementation would be conducted purely as an informational network, meaning a pure technical solution, this way to present the overall data would be strongly recommended to make the organisational interpretation of the common situational awareness easier. Like seen from the example in Figure 7, technical applications and especially the visualisation of the common situational awareness could allow very easy way to recognise varying hotspots and places to address organisational resources or focus further analysis. The programme used in this example is available and used by the City of Tampere, meaning that at least this tool would be instantly available.

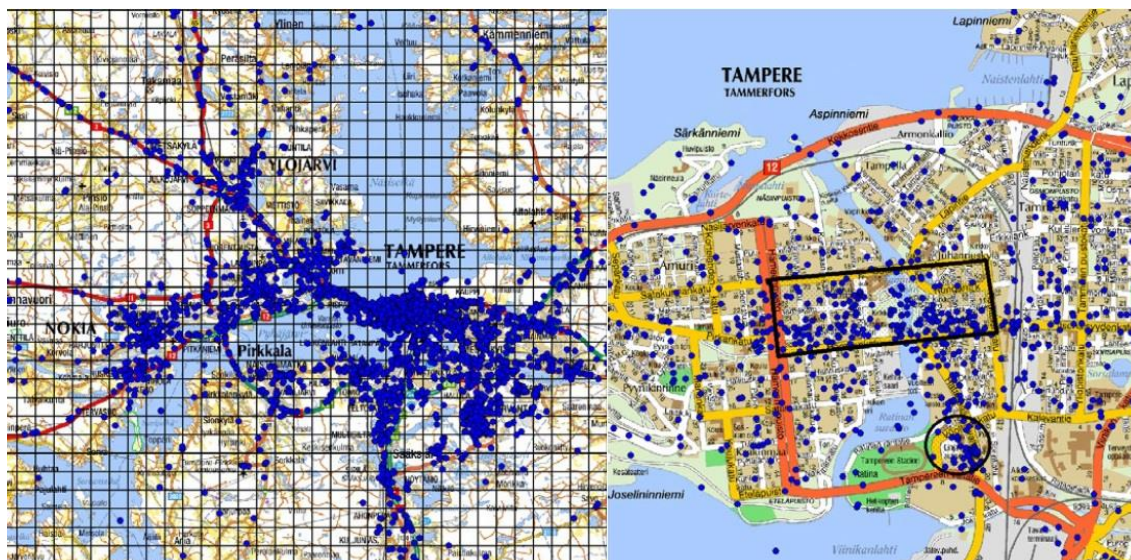


FIGURE 8. Examples of the visualisations from the Polstat-system (National Police Board of Finland, 2019, p. 89)

In addition to the possibilities, some technical implementations already exist. Like mentioned before, one example is shown in the previous Figure 8 which presents two examples on how the police already use their internal data. The left picture from the example in the Figure 8 presents how for example certain amounts of tasks or response times can be addressed in the chosen square-level. The right picture in the same example represents how emergency tasks and types can be examined on certain area with high detail. This information is told to be useful for example when following the effectiveness of certain local enforcement missions. (National Police Board of Finland, 2019, p. 89.)

To allow this kind of technical implementation of the common situational awareness to be usable especially at the operational level, its ingredients require some minimum features. Those are the type of the event, the spatio-temporal features, and the number of the events in varying locations. These were already available on some of the data. However, some of the statistics collected by participants such as the information on offered services or pure expert opinions and observations, and other human intelligence might require to be presented through different channels. In bare minimum, this intelligence might be required to be processed in a way which transforms it to contain the required features. Especially the human intelligence on the phenomena level, based on the expertise of field workers, might not automatically include any location features,

like a certain incident report from the police or security personnel reported in a pre-decided and unified format.

The problem of the lack of required features of the organisational intelligence could be solved rather easily. For example, mutual agreements which were referred to be important in the Whelan's (2016) research, could allow the creation of similar data coding between participants. Mutually coordinating what kind of location data for example should be included to the intelligence, could pre-format all data to be suitable for common use. This idea could also be considered more broadly for example in the private security industry. Could there be a unified coding for certain basic security related reports to allow local or even national comparison between companies, and between companies and authorities? If necessary, maybe some of the reporting could follow directly for example some of the same coding as the tasks of the police. While this includes questions, easily comparable data between varying facets could allow better comparison on varying aspects such as the issue of hidden crime, and of course, the overall creation of the common situational awareness.

A joint implementation of the local security network with the informational network as a supportive tool of sharing suitable intelligence would allow both enhanced operational and strategic work in the organisations. This joint implementation would also answer to the discussions where the mutual analysing and interpretation of the common situational awareness were seen very important by the interviewees. A suitable and relevant organisational intelligence could be inputted in the informational network available for all participants. The local security network could be used to further analyse the meaning of the common situational awareness and to coordinate any mutual actions. It could also allow to plan overall development of the area and the actions, together with all relevant participants. This dual method would allow both a more real-time common situational awareness to coordinate individual actions, as well as the possibility to create a mutual understanding, solutions and relationships between the participants. Ratcliffe (2007a, p. 9) also describes, how the analyst generating a correct suggestion to the decision maker should always have the knowledge on various crime prevention methods and other knowledge on what really works around the crime prevention. By using the local security network as a forum to interpret the intelligence mutually, varying knowledge

from all separate facets could be utilised to make sure that the suggestions and the interpretations would be as correct as possible.

Whichever way this idea is implemented, one aspect of the implementation is the format of the network itself. In both the technical implementation and in the network implementation, facilitation or ownership is required. According to the results, most of the interviewees wished either for a neutral leader to take charge or a project group allowing total equality between participants. The types of network governance discussed by Provan and Kenis (2007, pp. 213, 234–247), which could fulfil these wishes, would be the lead organisation-, or participant-governed networks or the network administrative organisation. In the lead organisation form, the leader of the group should be the City of Tampere itself, for all participants to accept the leadership without suspicions of the background ideologies behind the implementation. While the participant-governed network could be a one solution to the equality wishes from some of the interviewees, it could also pose unintended threats to the multisectoral co-operation. Both Skinns (2006) and Goris (2001) discussed in their research that security related networks might include actors with varying levels of authority. This kind of variation in the powers and the authority between the network participants could unintentionally transform the equal participant-governed network into a lead organisation-governed network ruled by the strongest authority. One of the most neutral and risk-free implementations could be the network administrative organisation. There the creation, upkeep and other governance of the whole common situational awareness work would be in the hands of a specific and purposefully chosen neutral facilitator.

To allow the common situational awareness to be equally beneficial to all participants it should also follow the Whelan's (2016, pp. 43–62) described type of an all-channel security network. The all-channel network could also prevent any individual hoarding of the intelligence by the central actor. One part of the suspicions around the possible concealment of the knowledge by the participants could be avoided when all shared knowledge would be directly open and available to all participants. This would require the organisational intelligence shared to the common situational awareness to be at the level of confidentiality which the participants would be open to share to all other participants. However, this should not be an issue if the shared intelligence stays around the security related statistics and phenomena level, which all interviewees agreed to be

willing and capable to share in the common situational awareness. The phenomena level would also be sufficient beginning for the common situational awareness when all respondents mentioned to benefit even from this kind of a phenomena level common situational awareness.

To assess the required participants of the network in relation to the security issue of crime and deviance, a brief criminological understanding could guide the selection process. Like for example, how Kivivuori et al. (2018) and Lab (2015) discussed about the reasons and the prevention of crime and deviance, only emphasised the fact that any effective solution would require a multisectoral approach. Even in the scale of a certain location, coordination of any kind should include the prevention in its varying forms as well as the reactive part of the issue. In minimum the implementation of this kind of a common security related situational awareness should include the same type of organisations represented in this research. All of them gathers and possess valuable information beneficial to all others, and all these participants are key players in the effective governance of this type of a problem.

This multisectoral approach would also cope with the issues mentioned by Higgins (2007, pp. 81–82), that a notable amount of crime is not reported to the police. He emphasises how for example the private sector and the third sector could be very valuable sources of crime related intelligence to the police (Higgins, 2007, pp. 81–82). This discussion was also highlighted in the answers of the respondents who mostly had similar opinions. This only emphasises the importance of the selection process of the participants. Including varying participants representing multiple sectors and fields of the security work only increases the usability of the common situational awareness for the members themselves.

In addition, the authority of the members to make decisions should be considered in the implementation stage. Like Crawford (2006) and Shepherdson et al. (2014) describes in their research, many coordination efforts have failed if the network did not have necessary members relevant to the issue or if the network lacked room or authority to be independent in their coordination and implementation efforts. Especially the low-level actors could have very highly detailed information about the local issues. However, they might lack the power to implement any ideas risen from the interpretation of the

common situational awareness. This authority side was also discussed in the answers of the interviews. One suggestion from those was to implement the network at high enough level between the organisation's decision makers. This way the knowledge would be already at the hands of the actual decision makers.

The ATT model presented by Molarius et al. (2020) offers a different kind of an idea to solve this issue. While the resources and the time of the decision makers were seen to be limited to participate in this kind of a network, it could be implemented in similar ascending way than in the ATT model described by Molarius et al. (2020). Lower-level actors could form the base level of the common situational awareness and conduct their part of the interpretation and implementation. The mutual interpretation of this common situational awareness and the varying development ideas which could not be implemented by the lower-level actors themselves, could be reported to other separate higher-level steering group or to the individual decision makers of the organisations. This way the constant coordination would be continuous at the lower level. At the same time the higher-level decision makers would receive only the necessary information without the need to participate for example in the process of daily operational level coordination and intelligence sharing. This way the common situational awareness would be a tool of co-operation for the lower-level actors, and it could also be formed to be a relevant intelligence product for the decision makers. Just like Ratcliffe (2007a, p. 8) described in the intelligence-led policing model. In any case, the dissemination to the decision makers is a crucial part of any intelligence process, and even the right and correct intelligence product which does not end up influencing any decision-making, is useless (Mackay & Ratcliffe, 2007, p. 148).

The effectiveness in relation to the goals or the whole purpose of the implementation should also be pre-considered. Like Virta (2013) mentioned in her research, many versions of the networked security governance in the past have lacked performance management and evaluation of the results. This was also emphasised in the results of the interviews. Some interviewees had connotations suggesting that there should be a real purpose for the creation of the common situational awareness. While the goal should be clear to increase the willingness to participate and allow the participants something to pursue for, it should also be considered while planning the implementation. For example, the research by Harking (2018) suggested that for this kind of a network to be

successful, the goals should be set up in a way where they either guide the selection process of the participants, or then the issues presented are selected to be those affecting all participants. If the goals are set up in a way where some of the organisations have no role in the matter, the interest to participate might fall and the network could end up in a failure. This relevance of the goals should be considered even if the implementation would focus on just the operational level, instead of the strategical implementation discussed previously in this chapter.

To draw up a conclusion from the implementation side of the common situational awareness, there are certain challenges which enhances the importance of a well-planned implementation. However, most of these issues can be avoided by listening to the opinions and interpretations of the possible participants. All interviewees were mostly eager to participate in any kind of work increasing the overall mutual co-operation. The creation of the common situational awareness was not only seen as a possibility, but even as a necessity to improve individual and broader decision-making. However, the implementation must be goal oriented and it must be conducted in a way which suits and is relevant to all participants. Otherwise, the participation and the individual use of resources might not be seen to be worth it by the possible participants.

4.3.2 Enhanced local security governance with the common situational awareness

This subchapter presents the discussion around the possibilities of the common situational awareness to the local security governance. While in its basics this kind of multisectoral common situational awareness could be seen as an intelligence product or a process, it could also act as a foundation for broader development of the local security governance in many ways.

One of the issues seen in the security-related common situational awareness in many of the answers was the issue of segregation of separate areas. It is easy to see how knowledge related the problems of a specific part of the city could stigmatise the whole population residing there, just like many of the interviewees mentioned. This presentation of data would allow room for varying problematic political discussions and negative labelling, based on for example to the background factors related to that specific area and its residents.

However, there are two separate factors which should be considered before the idea of a local common situational awareness is abandoned. The specialty of the downtown areas of large cities could mean that they could or should be addressed separately and independently from other residential areas. These areas include a broad number of specific threats and problems in relation to the amount of population and other assets needing increased protection. This specialty increases the need for more specific and open knowledge sharing between different sectors operating to secure that area. Also, it is a common knowledge that the downtown areas of large cities gather people together due the large number of services and entertainment they offer. In this sense, the detailed situational awareness from the downtown area, even if more public in its nature, might not in this sense stigmatise the residents living in these downtown areas.

The second issue is related to the implementation of a very detailed common situational awareness about the security situation in general. If the information would be presented in the detail seen for example in the previous Figures 7 or 8, it might allow a room to increase public understanding about the reasons of the issues. It might not stigmatise the whole area if the hotspots of the problems could be identified instead of framing the problem to be the problem of the whole neighbourhood. This kind of very detailed common situational awareness from public areas might allow people to understand why certain area is more problematic without the need to speculate about the backgrounds of its residents. The detailed situational awareness would probably show specific hotspots which could be used to explain the security problems of the area. For example, allowing the people to see that the crime and disturbance focuses on a major public transport station and not to the residential blocks, could debunk discussions related to the backgrounds of the people living in that same area. In this sense, this kind of very detailed common situational awareness could avoid the problems of segregation if the implementation of it would be considered thoroughly.

The effects of how this kind of a detailed common situational awareness would affect to the overall discussion and what kind of problems it would cause could be piloted relatively safely in the downtown areas of varying large cities. If this pilot would show that the implementation would cause more benefits than issues, it could even be transformed into larger scale increasing the possibilities for the security governance in municipalities or even at the regional level. However, due to the risks of segregative-

effects the perspective of confidentiality should be considered thoroughly, especially when trialling this kind of an idea at broader levels than downtown areas of varying cities.

The detailed common situational awareness would also give varying organisations a more reliable image of the problems related to the varying crime prevention methods. Eck (2002, pp. 279–284) and Lab (2015, p. 133) mentioned that the displacement and diffusion of crime is widely argued, but still recognised problem in the field of crime prevention. In relation to the previous discussions about the lack of performance management by Virta (2013), as well as the complexity angle of this issue, the detailed common situational awareness would allow a better evaluation of the true achievements of varying security actions. In the interviews many respondents discussed about the specific problem-solving projects focused on a certain hotspot. Whether these actions would be Lab's (2015) mentioned situational prevention methods, environmental design or for example varying other resource allocation to these specific sites, this kind of detailed common situational awareness would allow to see the actual effectiveness of these actions. Just to give out an example, increased control or the presence of an outreach work, implementation of lightning schemes, maintenance efforts or the development of a certain area could be monitored in high detail with this kind of common situational awareness.

Also, the common situational awareness would allow varying facets to see the actual benefits of separate methods to the actual problem even outside their own scope. Knowledge like this could guide the decisions-makers and organisations to implement correct actions and not waste any resources on ineffective responses. With the detailed common situational awareness, the diffusion or displacement could also be monitored to keep the prevention and response work in those areas where the need is the biggest. This kind of an improvement in the accuracy of the responses could eventually enhance the effects of varying smaller actions even at broader level in relation to the overall crime. Like Ratcliffe (2007c, p. 95) mentions, active intelligence gathering may come with a price, but the knowledge on the issues how for example criminal structure reacts to varying enforcement practices might be invaluable for the law enforcement. This fact can be seen to affect all the other organisations as well. Better knowledge on the

efficiency of varying actions could compensate for the costs of the implementation in the long run.

A multisectoral common situational awareness could also create a base for other improved co-operation between the participants. The points made by Head and Alford (2015, pp. 724–726) and O’Toole (1997, pp. 46–47) emphasised the importance of co-operation especially in relation to the wicked problems, which cannot be existentially solved. This kind of a common situational awareness might allow varying organisations to truly understand the importance and the value of the co-operation. Generating a concrete and visible knowledge on the efficiency of varying approaches could give these organisations the required fact-based evidence to recognise the importance to address issues mutually. While the recognition of the best methods could allow more enhanced use of the organisational resources, the fact-based evidence might also make the organisations to recognise the importance if this kind of work to allow enough resources to upkeep the mutual co-operation. Better fact-based knowledge and increased efficiency could even respond to the issue Virta (2013) mentioned, that especially the operational co-operation often lack continuity. When there would be concrete results to prove that the mutual coordination has actual visible effects, it could make these organisations more willing to upkeep and implement permanent resources to this side of the puzzle as well.

Any kind of mutual coordination could also allow a channel to increase mutual understanding between organisations. This could benefit the side of the attitudes mentioned by varying organisations in the results. For example, the police might still lack the true understanding of the benefits they could receive from the co-operation with the private security companies. If the common situational awareness would be implemented in a detail where it could present a more specific data on hidden crime and other relevant intelligence, they might see that the increased co-operation might not be a threat, but a must. The results suggested that the current co-operation between the police and the private security companies is almost non-existing or minimal. The importance of this co-operation was also emphasised in the 2019 report by the National Police Board of Finland (2019, pp. 109–110), and varying improvement suggestions were presented. However, according to the results of this research, these improvements are not yet implemented into practice for unknown reasons.

The same report emphasised that for example in relation to the preventive policing and its low resources, the police might have internal attitudes where the preventive policing is not seen as important as the ordinary police work. The reason for this could be the difficulty to calculate its effects. The future of preventive policing is told to focus to enhance the possibility to respond pro-actively and pre-emptively to developing issues instead of the current more reactive approach to problems. (National Police Board of Finland, 2019, pp. 46–47.)

The common situational awareness could be one solution to these kinds of internal issues as well. With better situational awareness created from common intelligence sharing, the police could achieve its goals to see developing issues earlier. The common situational awareness could also make the follow-up of the effectiveness of the police work easier, when especially the hidden information of the other sectors could become available to them. This would require the police to recognise the importance of the co-operation and to make sure that the resources of those units trying to conduct pre-emptive work and stakeholder co-operation are sufficient. However, all investments to some specific units are out from the resources of some other units if the overall budget is not increased. This makes all investments to be especially painful in this kind of an organisations where every field of work are very important. All co-operation and resources to that work should be seen as one of the top priorities, especially when the improved co-operation, coordination and the shared responsibility with private companies and other facets might eventually reduce the overall workload of the whole police.

The issue of not recognising the possibilities can be seen between other facets as well. The private security companies discussed broadly about the need for phenomena related information to plan their operational actions. At the same time all interviewed social sector organisations possessed very specific phenomena related human intelligence from the current street scene and crime, disturbance, or substance related phenomena, needed by the private security companies. Recognising the true value what these other facets could give to them, might also allow more room for the other discussions and even the changes wished by the other facets to happen. When the co-operation would be recognised as invaluable to be lost, these same organisations might be more open to discuss, co-operate and adapt in other ways as well. This seemingly forced eye opening

could even result to broader mutual development of the field of local security governance, and decreased opposition and confrontation between the organisations.

Sørensen (2014, pp. 68–80) mentioned that varying governance networks could even increase the democracy in a decision-making. Many of the interviewees saw that the idea of the common situational awareness could make the voice of varying facets to be heard in the overall decision-making. Especially, by interpreting the results of the common situational awareness mutually through the local security network, all varying voices from multiple sectors could be heard in one setting. This could in some way increase the democracy of some of the aspects of the local decision-making. However, this perception also enhances the need for a suitable implementation of the common situational awareness. Like the examples from Skinns' (2006) or from Goris' (2001) research shows, a wrong leader or an unequal implementation could cause a situation where the results presented as a multisectoral opinions, might in the reality be an individual opinion of the strongest participant who has just muted the voices of others.

A well implemented common situational awareness with other additional networking might have deeper benefits on the root causes of the issues themselves. Goris (2001) mentions, how the organisations participating in varying security networks should be allowed to keep their individual organisational goals intact, even if they would be somewhat conflicting with the others. For example, the discussion from the interview where the police were told to understand to stay away from a certain health services location for the substance abusers, was a good example of interorganisational understanding and respect for conflicting goals. This kind of a better interorganisational coordination could allow a better peace for work for varying organisations in other surroundings as well. At least then if the importance of those separate goals would be mutually understood. In the end, this could increase the overall effectiveness of every individual organisation. These organisations could coordinate their actions equally in a way which would prevent their individual actions to be conflicting and hindering towards other facets. Any increased knowledge about the effects of the organisations individual actions while operating in a complex adaptive system would only help every organisation around their own goals as well as in relation to the bigger picture.

As seen from the previous discussion, the idea of the common situational awareness could have long lasting and deep effects to the whole complex system. The problems are deep rooted into the backgrounds of the individuals and the society. At the same time the resources and possibilities of individual organisations are decreasing, and changing responsibilities like for example the transformation of official control to the private sector, are undeniable facts. These emphasises the view that the time of working in silos and seeing co-operation as a cost, instead of understanding its proven benefits, should be over. None of these actors can solve these problems alone and the increasing complexity of the system continues to lower the individual possibilities to have a real effect to the overall situation from separate silos.

4.3.3 Developing the response to security issues

The idea of the common situational awareness is just one of the possibilities to enhance the overall response to varying security problems. This subchapter presents discussions related to the other themes related to the issue of security, risen from the research.

Klijn (2008, p. 314) states, that understanding the complex systems could help to make the responses to the wicked problems more efficient. Like described by Juntunen and Virta (2019, p. 71), security is one of those wicked problems. These organisations working around the security situation in the downtown area of the city of Tampere should understand these concepts. From the results, this overall issue of the security of the downtown area is especially easy to see as an example of a complex adaptive system described by Maguire and McKelvey (1999, p. 27), and by Holland (2006, p. 1). For example, the previously mentioned presence of the police near the health service location offering varying services to substance abusers, could be recognised as a one example of this complexity. The police could easily find for example wanted persons and reveal varying substance related crime with increased supervision of these sites. However, their presence in this kind of locations could expel the people needing health services from these locations due the fear of being caught. This could even increase the overall crime and disorderly conduct in the long term. This kind of policing could lower the health and wellbeing of these already troubled people when the substance abusers could not receive the needed support and services, resulting in other kind of harms as well. Other kind of an example was presented when one of the interviewees discussed

how they might lack the organisational level willingness to participate in co-operation with certain private security companies. The reason for this was that the staff of the security company had caused bad street level experiences to their staff with negative conduct. These two previous examples shows that whether it is the problem itself or the responses, each organisation should understand that even small actions could have unexpectedly large consequences. These examples emphasise the need for increased co-operation and mutual coordination to prevent any negative results and to increase the positive ones.

The issue of complexity can also be recognised elsewhere. For example, the possibility to release internal organisational intelligence by the private security companies could be prevented by an individual customer. This could happen even if the companies themselves would be open to share these detailed statistics they collect from their work. This paints a good picture about the complexity related to the possibilities of co-operation around this theme. Even if there would be the means and the willingness, some other matter could prevent the working implementation enhancing the importance of well-planned approach.

However, the previous example related to the data collected by the private security companies include one specific issue related to the overall privatisation of the security. These companies wish for more responsibility and possibilities to offer services previously being the sole responsibility of the public authorities. Same kind of connotations were presented in the report related to the resources of the police, which mentioned that the use of security personnel could be increased in many areas (National Police Board of Finland, 2019, pp. 109–111). While the public authorities have the responsibility to share knowledge which is not specifically confidential by the law, and co-operate with varying facets, should this kind of responsibility be then implemented to the private companies as well? Like mentioned by all private security company respondents, the foundation for their knowledge gathering lies on the law. Maybe these private security companies should be ordered to be open about the security related knowledge relevant to the development of the public security, at least if they receive further rights and possibilities related to the public security. This could at least force the private security industry to co-operate and assist the public authorities in exchange for the increased business possibilities. Of course, this discussion could include all other

necessary co-operation between varying facets, and not everything can or should be ordered by the law. However, if the siloes cannot be broken voluntarily, in the end something should be done. Especially when the transformation of the official control from the hands of the public authorities to the hands of the private companies continue. If the private sector receives further possibilities related to the security of the public areas, this side responsibility for increased transparency and co-operation should be considered as well.

This issue of the co-operation also includes other connotations. Especially, the conflicting ideologies between the security actors and the social work opens endless possibilities for discussion. One of the issues seen by the social work organisations were that there should be more places for the substance abusers to be, and that they have equal rights to the public space just like any other people. However, many of the security actors had connotations that their services should be relocated from the downtown area to reduce their amount, and overall disorderly conduct in the downtown areas. But where could they be relocated? What if this discussion would be addressed from other direction? If the substance abusers for example, would have enough varying places close to their normal hang around locations to be and to spent time and get support, could that be a better solution for all? The open discussion related to the controlled injection sites and other ideas around harm reduction should be started. Like mentioned in the interviews, when these people have no lawful places to be, they occupy those places meant for other use, like the public bathrooms.

At the same time when the harm reduction around substance abuse is a taboo, different facets paint their walls with products allowing the easy removal of graffities, when they know that the society cannot existentially remove the problem. Maybe the society should try accepting that there are other problems which cannot be existentially solved. With mutual understanding and acceptance, separate organisational entities might be able minimise the harm what those problems cause to the rest of the society. With the increased co-operation varying organisations working around the issue of security could start to see the other sides of the issue as well and start to implement more effective solutions for these wicked problems. Open discussion around the issue might help everyone to see the harm reduction as a better solution. Controlled injection sites and a necessary number of good places for the substance abusers to be might reduce the

overall problems. Public bathrooms and the yards of kindergartens might end up being free of used needles and intoxicated persons. The security personnel could easily just guide the substance abusers to a better more suitable place instead of forcibly removing them from the shopping centres just for them to move to the next one. These things are just some caricaturist examples of those actual benefits what this kind of ideology could allow instead of the endless and unwinnable war to remove all substance abusers from our sights.

In relation to the previous theme, all private security company respondents mentioned that they saw these specially trained youth security stewards as an effective and more permanent solution to the problems caused by youths. This kind of an open-minded attitude should be implemented to the other problems as well. Why there could not be for example special security stewards trained to approach the substance abusers as well? Or could this kind of a more subtle and co-operating approach to any kind of problems caused by people be a basic part of their training in the first place. Now it is a special service with a special price to the customer, but should that be the basic requirement for all security staff from the beginning? According to the Police University College (2022), they have recently changed their curriculum to emphasise preventive work, interaction and people skills, and intelligence-led policing. Same type of skills could be very useful to be trained for the private security personnel as well. This could also be one of the aspects which could be improved by working together with other fields more familiar with the root causes of the problems. Close co-operation with for example the social work could carry some ideological changes to these companies as well, as a one positive side effect of the improved co-operation.

The overall issue of these youth security stewards, and the broad amount of useful information possessed by these private security companies, which is not reported to any authorities, raises more in-depth questions about the whole privatisation of the security. One could even ask if the whole industry has forgotten the overall goal of the security work? Should the private security companies understand that they already have a large role in the upkeep of law and order in Finland and that this role should also bring varying responsibilities outside of the pure chase for more revenue? Their security personnel conducts varying number of duties and possess a broad number of rights to intervene to the actions of people. The question which should be considered is, how far

the upkeep of law and order can be privatised without any improved requirements to the training of the staff or to the responsibilities of the companies? All extra work and training are direct costs to the companies. It might be, that without legal changes to make certain improvements obligatory, there might be always those customers not willing to pay extra for improved security work, and at the same time those companies which are not willing to lower their profits to be more ethical. Without the legal changes one could only hope that the companies understand the possibilities they could gain from better training and co-operation. Possibilities which are not limited to the increased work safety of their staff, improved customer service and enhanced intelligence available for their use if they would be ready to invest in the development of the industry.

All social work respondents also mentioned that both the police and the private security sector have in many cases transformed to these actors who are there only when an intervention is required. In some cases, this could be a pure resource question, but in general this interpretation and concern should be taken seriously. The official control by these facets should be a normal and accepted part of the society. The security personnel and the police should be there not just to intervene, but to be present in a positive meaning as well. Overall, the connotations wishing for more approachable and present official control by the police and by the security personnel should be heard. In the worst-case scenario if the resources and the willingness or the training does not allow for the control to be anything more than pure intervening actor, it could just worsen the overall security situation causing an unwanted rat race.

The proven benefits of harm reduction work around the problems caused by difficult issues such as drugs does not end in the concrete harm reduction activities itself. Harm reduction perspective can act as a good guide for improved intelligence related to the efficiency of security related operations. Varying health related statistics, different local surveys or even data from non-security ministries are mentioned to be possible sources of the enhanced intelligence. Those could be utilised by law enforcement to see the variations in the security situation. The idea of harm reduction should also be brought to the strategy table, and the responses should go above the law enforcement responses. If this idea is accepted, serious crime could be tackled with the wide resources of many varying organisations. (Sheptycki & Ratcliffe, 2007, pp. 205–207).

This discussion by Sheptycki and Ratcliffe (2007, pp. 205–207) can be seen as one of the main benefits and ideologies behind this kind of a common multisectoral situational awareness. However, there is also one side of the issue which was not included to this research. Like Sheptycki and Ratcliffe (2007), the social work interviewees also emphasised the health-related statistics as a good source of security related intelligence. They recognised that for example the health-related statistics could be very useful for them in the situational awareness process. For example, the location and timeliness of the emergency medical service tasks was seen to be valuable source for the hotspots, and the emergency room statistics from drugs could be useful to understand more about the current phenomena-level situation.

The harm reduction angle might have negative connotations in some discussions. However, it is a very useful ideology to recognise more effective responses and even to create better intelligence, such as the common multisectoral situational awareness. Understanding and utilising the views from the harm reduction, the overall effectiveness of the common security actions could be followed in more detail than just through the traditional crime or incident statistics. Improved health or the feeling of security could be seen to be a one kind of an indicator for the security situation as well. And vice versa, implementing harm reduction activities could influence the traditional security statistics as well instead of pure enforcement actions. While this angle could be difficult to be accepted by some facets, co-operation and mutual discussions could lead to more effective and humane handling of the security issues.

In general, the overall coordination and co-operation in all levels could benefit all participants responding to the wicked problem of security. Opening eyes, looking the issue from both sides, and making room for open discussions could benefit all operators and develop the overall security governance in many unexpected ways. By looking at the situation through the common situational awareness created from the organisational intelligence possessed by varying facets, the mutual coordination and efficiency could be traced with more detail. This way the individual operations and processes could be adjusted and new ways to upkeep the security could be found. While this research was focused on the common situational awareness, it is based on the same ingredients than the future of the security governance should be, sharing and addressing the issues together.

4.4 Limitations of the study and suggestions for future research

This chapter presents the limitations of the study in relation to the implementation of the research. Also, suggestions related to the further research of the subject are presented after the limitations.

The main limitations of this research are bound to the sampling. The issue of sampling contains few limitative factors. First, the interviewees were representing only eight different organisations working around the issue. The sampling was focused on the organisations operating directly with the issue and for example, all main security actors of the area were represented. However, there are a broad variety of other organisations which could have possessed relevant knowledge in relation to the research.

Organisations such as the rescue department producing emergency medical services and fire and rescue services, varying municipal service producers or commercial sector could be some of those facets which might have relevant information for further research.

The limitations related to the sampling does not end in the amount of the organisations themselves. As mentioned in the paper, the number of individual interviewees varied from one to three respondents per interview. This research was implemented by using the expert interview as the main source of data, and those experts interviewed represented knowingly their whole organisations. Still, there is a large possibility that some connotations and interpretations were the individual opinions of the experts themselves, instead of pure organisational ideologies and policies. While the interviews with multiple participants might represent their whole organisations with better extent, the interviews with only one respondent might be more prone to contain personal opinions and interpretations, and other distortions.

This research was also narrowed to study this phenomenon in just one of the large cities in Finland. Including other cities could broaden the overall possibilities to generalise the results. This specific scope further limits the results to be mainly relevant and trustworthy in the selected city. However, the main connotations could be similar throughout the other large cities in Finland, but this cannot be proven without further study.

The overall process of the research included stages such as reduction of the interviews, and translations of the results. All these stages possess a possibility for something to be interpreted and presented in a different way what was meant by the interviewees. Some relevant information could also be left out unintentionally during the reduction stage. Like mentioned before, qualitative research has its own issues and the interpretations presented in this paper are the interpretations made by the researcher himself from the collected data. Other interpretations and even pure mistakes are always possible, even though the research was conducted with utmost care possible.

The analysis stage was conducted as a thematic analysis. During the analysis there were findings which suggested that other analysis methods could also be very fruitful for this kind of research. For example, discursive approaches might have presented fascinating results especially when it was seen that the connotations and terms used by separate interviewees especially about the security problems and substance abusers were very interesting and varying, and in some cases even conflicting. This is not a direct limitation because the selected analysis method was proven to be very useful. Still, different approaches to the same issue could also present very interesting findings about the possibilities and challenges of this kind of a work, so this should be kept in mind in any further research.

The recognised suggestions for further research start from the obvious idea of broader sample presented in the limitations. Especially, the few individual suggestions related to the need for health care data could represent one necessary direction for further research around the common situational awareness. For example, referring to the personal experiences of the researcher, the rescue department could possess a broad amount of relevant data for this kind of common security work. Especially, the rescue services resource and accident statistics program (PRONTO) might contain very useful data related to the fire and rescue, and the EMS tasks with detailed statistical data, dates, locations and even visualisations similar to the Figure 8 presenting the police reporting systems. Research around this and the data available from hospitals and emergency rooms or from other health care services could have a lot of potential for further research around the concept of the common situational awareness related to the issue of security.

Like mentioned in the limitations, commercial sector and varying other service producers from municipalities could also be relevant sources for improved security related knowledge. Including varying non-security related facets to further research could increase the understanding about the question of where this kind of improved intelligence describing the true security situation could be collected. Further research could also include broader examination about the legal side of the common situational awareness and mutual data handling. In relation to the legal possibilities and challenges, the side of the mutual agreements or commercial secrets and other limitative factors should be studied in more depth to present a more detailed image of the possibilities and challenges. Further research should also include more in-depth study related to the technical systems and the possible legal side of the possibilities or challenges related to the combined system of the common intelligence. This way the true possibilities to create an automatic system for the common situational awareness would be found out.

Also, the issue of combining the local data and the possible challenges like the segregation of city parts should be researched further. This could be conducted even as a pilot project of a detailed common situational awareness of the security situation related to a downtown area of a certain large city. This kind of pilot project could show and prove the true possibilities and challenges of the whole idea, and this kind of pilot with real concrete results could even cause further positive movement elsewhere in Finland, or at least around the co-operation in general. The concept itself contains varying connotations from the organisational perspectives to the issues such as harm reduction. Any concrete pilot of the common situational awareness and overall co-operation could open a lot of possibilities and needs for other research around these themes as well.

One last suggestion for the future research came from the review of the organisational statistics. Especially, the statistics collected by the private security companies and the statistics collected by the police could be compared. A more precise review between the specific security related statistics collected by the police and the private security companies from certain locations could reveal more about the issue of hidden crime. This kind of more precise review could also show if the statistics collected by the police tells a different story about the situation compared to the statistics collected by the

private security industry. It could reveal interesting information about the amount of crime and disorderly conduct which never ends up to the official crime statistics.

5 SUMMARY OF CONCLUSIONS

This research examines the possibilities and challenges of the creation of a common situational awareness between the public, private and third sector organisations regarding the security situation in the downtown area of the city of Tampere. Also, this research identified what kind of knowledge is collected by different organisations operating around the issue of security in the downtown area of the city of Tampere.

The overall results of this research are mainly positive. The possibilities of the multisectoral common situational awareness vary from the enhancement of the strategic and the operational decision-making of individual organisations. Broader possibilities include the enhanced development of the city and its policies, and the overall co-operation and coordination between varying actors operating around the same wicked problem of security.

The concluding results suggest that the creation of the common situational awareness between varying sectors is possible and even wished by most of the respondents. All results indicate that separate organisations recognise various benefits for the creation of the common situational awareness. Mainly the benefits are seen as the improvement of the organisational decision-making and resource coordination. However, many of the organisations saw this kind of work as a basis for the creation of a broader understanding and also for creating a common and mutually agreed approach to the whole issue of security. Especially, the common interpretation of the situational awareness itself was seen as one of the most important parts of the whole process allowing a forum of open discussion and analysis on how to conduct effective security work.

Results show that the best possibilities for creating the common situational awareness lie around operational and strategic levels. The co-operation was wished and needed at these levels by most of the participants. All facets described how a more detailed picture of the security situation and varying development could allow them a wide variety of benefits making the participation tempting. The strategic level was seen important to be able to prepare and adapt to future developments of the city as well as to be able to have

a possibility to affect to the long-term changes through this kind of co-operative forum. The operational level was seen especially beneficial by all facets with street level staff. This level of more real-time knowledge was told to be needed specifically to enhance the use of individual organisational resources, to coordinate mutual resource implementation and to prepare for varying threats and changes with better accuracy. Most of the respondents were however very eager to participate in any kind of common situational awareness work because the mutual knowledge sharing, and intelligence creation was seen crucial to operate efficiently in this kind of complex system.

The current organisational intelligence possessed by these organisations was vast. All security related respondents possessed very detailed security related statistics describing the type of varying incidents in addition to the time and the locations of those incidents with high detail. Interestingly, the statistics collected by the private security companies were mentioned to include a broad number of incidents which never ends up to the official crime statistics of the police. Also, all respondents possessed remarkably detailed human intelligence from their staffs' individual observations made during their daily operations. The social work interviewees described themselves to possess very detailed human intelligence gathered from their street level work and confidential customer encounters about the current trends and the security situation of the downtown area of the city. Security actors and the city also created specific, more detailed professional intelligence products for varying decision-making of different stakeholders. All in all, the varying organisational intelligence being collected could be seen to complement the individual intelligence of the separate organisations in a way which could make the common situational awareness to pay back any resources implemented to the process itself.

While some of the organisational intelligence was highlighted to be strictly confidential, the most needed information related to phenomena level was mentioned to be available by all respondents. The security organisations described that pure security related statistics could be shared if the level of detail is suitable for the organisations. The social work respondents mentioned that while anything that risks their sensitive and delicate relationships between their customers and their staff will not be shared, trends and phenomena can be openly discussed and analysed. Overall, all actors agreed that at least phenomena level knowledge and general statistics can mainly be shared without

many issues. The main possibility lies on this theme, because at the same time all respondents agreed that the statistics and phenomena level knowledge would be beneficial for their internal operations and as a such sufficient beginning for the common situational awareness work.

The interpretations on the practical implementation of the common situational awareness suggested that the correct implementation is the main requirement for the common situational awareness to be achievable. All respondents agreed that the local security network -type implementation could be the easiest way to create common knowledge sharing. It could also allow further benefits, such as other kind of networking and communication with varying stakeholders. Also, the local security network implementation would not require the shared intelligence to be in any specific format as the sharing and mutual interpretation could be executed through mutual interactions and communication. It would also be the most suitable implementation for the strategic level. The informational network as a technical implementation was also thought to be very useful. This implementation could allow some of the knowledge to be shared in more real-time manner allowing the operational use of the common situational awareness. While some of the knowledge was already in a format suitable for varying technical implementations such as the statistics collected by the security authorities, some of the knowledge would require different way of presentation or pre-processing. For example, the phenomena level human intelligence would be more difficult to be presented through technical applications in contrary to the statistics, at least without manually inputting spatio-temporal and other features to it. The common interpretation of the results was seen as one of the main benefits of this kind of work. All respondents saw that if the implementation focuses on the technical way of information sharing, it should be supported with the local security network -type of gatherings where mutual interpretation and other wished benefits could be achieved.

The interpretations related to the practical implementation also included connotations about the format of the network. According to the results, the best and most suitable way to encourage participation would be to implement any form of a network through a neutral way: the participants should be governed by a neutral actor such as the City of Tampere itself or a separate neutral facilitator. This way the interpretation of the common situational awareness could present the opinions of all actors and the risk for

one strong bias actor to hijack the network and turn it to implement its personal ideologies would be minimised. When the leading actor would be as neutral as possible, the participating organisations would not have to ponder about the possible background reasons behind the implementation. However, while the equality between the participants and open interpretations was one of the most important aspects in the implementation, a completely equal group implementation in which all participants are at the same level might pose hidden risks. In this kind of implementation varying authority levels could cause the network to transform into a lead-actor governed network completely unintentionally, resulting in negative outcomes for the weaker authority members.

The actual problems experienced around the theme were mostly related to the implementation of the common situational awareness. Especially, the technical implementation was seen as the most problematic due to the expenses related to the development of a system being capable of communicating with varying organisational systems. This was also seen as a problem: if the common situational awareness system could not gather the statistics and other knowledge automatically, the knowledge would have to be manually inputted and as a such it would become a possible expense to the participants requiring time of certain people to do this work manually.

Some of the experienced challenges were focused on the theme of interorganisational attitudes. Also, a lot of suspicions were raised around the possibilities and willingness of the other organisations to share relevant knowledge. However, these problems were mostly debunked or seen as a possibility as well. For example, the experienced challenges related to the willingness of the private security companies to share knowledge, because they could be interpreted to be commercial secrets, were debunked by the companies themselves. All companies saw that sharing general security related statistics or phenomena level knowledge does not cause any conflict of interest. Similarly, many of the respondents experienced that the police might lack the willingness or possibility to share relevant knowledge. On the contrary, the police saw that the downtown areas of large cities could be specific surroundings where this kind of more detailed mutual knowledge sharing could, or even should be conducted to allow enhanced upkeep of the security. Similarly, the varying organisational attitudes were seen as a possible source of cultural clashes. At the same time, any kind of better co-

operation and interaction were seen as a good possibility to influence to these ideologies of other organisations, encouraging the participation in any kind of mutual work.

Overall, the possibilities to create the common situational awareness in relation to the security situation of the downtown area of the city of Tampere are vast. Most of the problems can be defeated or bypassed with pre-agreed and well-planned implementation. For example, while creating a technical system generating automatic situational awareness from the organisational knowledge might be a too ambitious goal, the possibilities for any kind of local security network -based implementation are great. All organisations experienced this idea as a good and needed development in the field of local security governance. The precise way of the implementation or the level of the implementation was not seen as a matter of high importance, as any kind of mutual co-operation was interpreted to hold a vast variety of possibilities to all participants. The common situational awareness might not be just a new and useful intelligence process or a product, but a base for enhanced mutual development of the whole concept of the local security governance.

REFERENCES

- Aho, P. (2006). *Yksityinen turvallisuusala: poliisin kilpailija vai yhteistyökumppani?* Master's thesis. Available at: <https://urn.fi/urn:nbn:fi:uta-1-16319> (Accessed: 26 March 2022).
- Alastalo, M. and Åkerman, M. (2010). Asiantuntijahaastattelun analyysi: Faktojen jäljillä. In Ruusuvuori, J., Nikander, P. and Hyvärinen, M. (Eds.). *Haastattelun analyysi*. [Online] Tampere: Vastapaino. Available at: <https://www.ellibslibrary.com/book/978-951-768-309-8> (Accessed: 7 March 2022).
- Alastalo, M., Åkerman, M. and Vaittinen, T. (2017). Asiantuntijahaastattelu. In Hyvärinen, M., Nikander, P. and Ruusuvuori, J. (Eds.). *Tutkimushaastattelun käsikirja*. [Online] Tampere: Vastapaino. Available at: <https://www.ellibslibrary.com/book/9789517686112> (Accessed: 4 March 2022).
- Alasuutari, P. (2011). *Laadullinen tutkimus 2.0*. [Online] Tampere: Vastapaino. Available at: <https://www.ellibslibrary.com/book/978-951-768-385-2> (Accessed: 15 March 2022).
- Alberts D. S., Garstka, J. J., Hayes, R. E. and Signori, D. A. (2001). *Understanding Information Age Warfare*. Library of Congress. Available at: http://www.dodcrp.org/files/ncw_report/report/UIAW.pdf (Accessed: 24 March 2022).
- Aven, T. (2014). 'What is safety science?', *Safety Science*, 67, pp. 15–20. doi: 10.1016/j.ssci.2013.07.026.
- Braun, V. and Clarke, V. (2006). 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77–101. doi: 10.1191/1478088706qp063oa.
- Bushway, S. D. & Reuter, P. (2002). 'Labor markets and crime risk factors', In Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (Eds.). *Evidence-Based Crime Prevention*. London: Routledge, pp. 198–240.
- Business Tampere. (2021). *Tampereen ydinkeskustan turvallisuustilanne yritystoiminnan näkökulmasta*. Internal report. Unpublished.
- Christopher, S. (2007). 'A practitioner's perspective of UK strategic intelligence', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 177–193.
- City of Tampere. (2021). *Tampereen kaupungin turvallisuuskysely*. Internal report. Unpublished.
- City of Tampere. (2022). *Turvallisuuskyselyn 2021 tuloksia, Tampere keskus*. Internal report. Unpublished.
- Clausnitzer, J. (2021). *Number of police officers in Finland from 2010 to 2020*. Statista. Available at: <https://www.statista.com/statistics/540383/finland-number-of-police-officers/> (Accessed: 22 March 2022).
- Crawford, A. (2006) 'Networked governance and the post-regulatory state? Steering, rowing and anchoring the provision of policing and security', *Theoretical Criminology*, 10(4), pp. 449–479. doi: 10.1177/1362480606068874.

- Crump, J. (2015). *Corporate Security Intelligence and Strategic Decision Making*. Boca Raton: CRC Press.
- Dominguez, C. (1994). 'Can SA be defined?', In Vidulich, M., Dominguez, C., Vogel, E. and McMillan, G. (Eds.). *Situation awareness: Papers and annotated bibliography*. Wright-Patterson Air Force Base, Ohio: Armstrong Laboratory, pp. 5–15. Available at: <https://apps.dtic.mil/sti/pdfs/ADA284752.pdf> (Accessed 25 March 2022).
- Dupont, B. (2004). 'Security in the Age of Networks', *Policing & Society*, 14, pp. 76–91. doi: 10.1080/1043946042000181575.
- Eck, J. E. (2002). 'Preventing crime at places', In Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (Eds.). *Evidence-Based Crime Prevention*. London: Routledge, pp. 241–294.
- Endsley, M. (1991). *Situation awareness in advanced strategic mission (Tech. Report No. AL-TR-1991-0083)*. Wright-Patterson Air Force Base, Ohio: Armstrong Laboratory.
- Eskola, J. and Suoranta, J. (1998.) *Johdatus laadulliseen tutkimukseen*. [Online] Tampere: Vastapaino. Available at: <https://www.ellibslibrary.com/book/978-951-768-035-6> (Accessed: 18 March 2022).
- Eskola, J., Lähti, J. and Vastamäki, J. (2018). Teemahaastattelu: Lyhyt selviytymisopas, In Valli, R. (ed.). *Ikkunoita tutkimusmetodeihin 1: Metodien valinta ja aineistonkeruu: virikkeitä aloittelevalle tutkijalle*. 5th Edn. [Online] Jyväskylä: PS-kustannus. Available at: www.ellibslibrary.com/book/978-952-451-516-0 (Accessed: 4 March 2022).
- Farrington, D. P. and Welsh, B. C. (2002). 'Family-based crime prevention', In Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (Eds.). *Evidence-Based Crime Prevention*. London: Routledge, pp. 22–55.
- Finnish institute for health and welfare. (2022). *Jätevesitutkimus: väestötason huumeiden käyttö*. Available at: <https://thl.fi/fi/tutkimus-ja-kehittaminen/tutkimukset-ja-hankkeet/jatevesitutkimus> (Accessed: 25 March 2022).
- Finnsecurity ry. (2020). *Tietoa toimialasta*. Available at: <https://www.finnsecurity.fi/ajankohtaista/tietoa-toimialasta> (Accessed: 22 March 2022).
- Goris, P. (2001). 'Community Crime Prevention and the 'Partnership Approach': A Safe Community for Everyone?', *European journal on criminal policy and research*, 9(4), pp. 447–457. doi: 10.1023/A:1013103623175.
- Gottfredson, D. C., Wilson, D. B. and Najaka, S. S. (2002). 'School-based crime prevention', In Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (Eds.). *Evidence-Based Crime Prevention*. London: Routledge, pp. 56–164.
- Grieve, J. (2007). 'Developments in UK criminal intelligence', In J. H. Ratcliffe (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 25–36.
- Harkin, D. (2018). 'Community safety partnerships: the limits and possibilities of 'policing with the community'', *Crime prevention and community safety*, 20(2), pp. 125–136. doi: 10.1057/s41300-018-0042-y.

- Hassan, B. (2019). Pragmatics. In Washbourne, K. and Van Wyke, B. (Eds.). *The Routledge Handbook of Literary Translation*. London: Routledge.
- Head, B. and Alford, J. (2015). 'Wicked Problems: Implications for Public Policy and Management', *Administration & society*, 47(6), pp. 711–739. doi: 10.1177/0095399713481601.
- Higgins, O. (2007). 'Rising to the collection challenge', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 70–85.
- Hirsjärvi, S. and Hurme, H. (2008). *Tutkimushaastattelu: Teemahaastattelun teoria ja käytäntö*. Helsinki: Gaudeamus Helsinki University Press.
- Holland, J. (2006). 'Studying Complex Adaptive Systems.', *Journal of systems science and complexity*, 19(1), pp. 1–8. doi: 10.1007/s11424-006-0001-z.
- Immonen, M. (2016). *Moniammatillisen viranomaisyhteistyön hyödyt ja haasteet ympäristöriskosten ehkäisy- ja torjuntatyössä*. Master's thesis. Available at: <https://urn.fi/URN:NBN:fi:uta-201604201443> (Accessed: 25 March 2022).
- Juntunen, T. and Virta, S. (2019). 'Security Dynamics: Multilayered Security Governance in an Age of Complexity, Uncertainty, and Resilience', In Kangas, A., Kujala, J., Heikkinen, A., Lönnqvist, H., Laihonon, H. and Bethwaite, J. (Eds.). *Leading Change in a Complex World: Transdisciplinary Perspectives*. Tampere: Tampere University Press.
- Kalliosaari, K. (2021). 'Poliisi ja kaupungin ylin johto tapasivat – etsivät nyt keinoja turvallisuuden parantamiseksi Tampereen keskustassa', *Aamulehti*, 7 October. Available at: <https://www.aamulehti.fi/tampere/art-2000008315780.html> (Accessed: 22 March 2022).
- Keast, R. (2014). 'Network Theory Tracks and Trajectories: Where from, Where to?', In Keast, R., Mandell, M. and Agranoff, R. (Eds.). *Network Theory in the Public Sector: Building New Theoretical Frameworks*. London: Routledge, pp. 15–30.
- Keto-Tokoi, J. (2021). 'Siviiliasuiset poliisit liikkuvat Tampereen keskustassa ja todistavat yhä härskipää huumekauppaa: "Näkyvällä paikalla keskellä kirkasta päivää" – Jopa 15-vuotias saattaa myydä kovia huumeita', *Aamulehti*, 5 December. Available at: <https://www.aamulehti.fi/rikos/art-2000008421848.html> (Accessed: 24 March 2022).
- Kietäväinen, T., Oulasvirta, L. and Uusitalo, R. (2022). *Selvitys poliisin määrärahojen käytöstä ja määrärahojen riittävyyteen liittyvistä tekijöistä*. Publications of the Ministry of the Interior 2022:24. Available at: <https://urn.fi/URN:ISBN:978-952-324-593-8> (Accessed: 22 March 2022).
- Kinnunen, R., Liljeroos-Cork, J. and Virta, S. (2021). *A situation picture of security in municipal service production and municipal councils. Report, part 2*. Prime Minister's Office. Available at: <http://urn.fi/URN:ISBN:978-952-383-077-6> (Accessed: 25 March 2022).
- Kiviniemi, K. (2018). Laadullinen tutkimus prosessina. In Valli, R. (ed.). *Ikkunoita tutkimusmetodeihin 2: Näkökulmia aloittelevalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin*. 5th Edn. [Online] Jyväskylä: PS-kustannus. Available at: <https://www.ellibslibrary.com/book/978-952-451-825-3> (Accessed: 17 March 2022).

- Kivivuori, J., Aaltonen, M., Näsi, M., Suonpää, K. and Danielsson, P. (2018). *Kriminologia: Rikollisuus ja kontrolli muuttuvassa yhteiskunnassa*. Helsinki: Gaudeamus.
- Klijn, E. (2008). 'Complexity Theory and Public Administration: What's New?', *Public Management Review*, 10(3), pp. 299-317. doi: 10.1080/14719030802002675.
- Lab, S. P. (2015). *Crime Prevention, Approaches, Practices, and Evaluations*. Milton: Routledge.
- Lepola-Lång, S. (2020). *Leadership in a changing security environment*. Master's thesis. Tampere University. Available at: <https://urn.fi/URN:NBN:fi:tuni-202004284241> (Accessed: 25 March 2022).
- Mackay, D. and Ratcliffe, J. (2007). 'Intelligence products and their dissemination', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 148–162.
- Maguire, S. and McKelvey, B. (1999). 'Complexity and Management: Moving from Fad to Firm Foundations.', *Emergence (Mahwah, N.J.)*, 1(2), pp. 19–61. doi: 10.1207/s15327000em0102_3.
- McDowell, D. (1998). *Strategic intelligence: A handbook for practitioners, managers and users*. Istana Enterprises.
- McNabb, D. E. (2018). *Research Methods in Public Administration and Nonprofit Management*. 4th edn. Milton: Routledge.
- Ministry of the Interior. (2021). *Government Report in Internal Security*. Available at: <http://urn.fi/URN:ISBN:978-952-383-769-0> (Accessed: 25 March 2022).
- Ministry of the Interior. (2022). *Poliisi ylläpitää yleistä järjestystä ja turvallisuutta*. Available at: <https://intermin.fi/poliisiasiat/yleinen-jarjestys-ja-turvallisuus> (Accessed: 24 March 2022).
- Molarius, R., Jukarainen, P., Kekki, T., Keränen, J., Laitinen, K., Riikonen, R. and Norri-Sederholm, T. (2020). *Alueellisen turvallisuuden tila (ATT) – alueellista turvallisuussuunnittelua ja varautumista tukeva seuranta-, arviointi- ja ennakointimalli*. Prime Minister's Office. Available at: <http://urn.fi/URN:ISBN:978-952-287-945-5> (Accessed: 25 March 2022).
- Morishige, R.I. and Retelle, J. (1985). 'Air combat and artificial intelligence', *Air Force Magazine*, 68(10), pp. 91–93.
- Mäkinen, P. (2021). 'Lukijaraadin kanta on selvä: Maskiroska raivostuttaa Tampereella – ”Enää eivät riitä olutmäyräkoirat ja tupakantumpit”', *Tamperelainen*, 5 May. Available at: <https://www.tamperelainen.fi/paikalliset/4137037> (Accessed: 24 March 2022).
- National Police Board of Finland. (2019). *Valvonta- ja hälytystoiminnan tila, selvityshankkeen loppuraportti*. Available at: https://poliisi.fi/documents/25235045/42553324/valvonta_ ja_halytystoiminnan_til_a_selvityshankkeen_loppuraportti.pdf (Accessed: 11 May 2022).
- O'Toole, L. (1997). 'Treating Networks Seriously: Practical and Research-Based Agendas in Public Administration', *Public administration review*, 57(1), pp. 45–52. doi: 10.2307/976691.

- Perttula, J. (2016). *Kolmas sektori kumppanina turvallisuusverkostossa*. Master's thesis. Tampere University. Available at: <https://urn.fi/URN:NBN:fi:uta-201603221352> (Accessed: 25 March 2022).
- Phythian, M. (ed.) (2013a). *Understanding the Intelligence Cycle*. Milton: Routledge.
- Phythian, M. (2013b). 'Introduction: Beyond the Intelligence Cycle?', In Phythian, M. (Ed.). *Understanding the Intelligence Cycle*. Milton: Routledge, pp. 1–8.
- Police of Finland. (2022). *Toimintaympäristö ja tilastot*. Available at: <https://poliisi.fi/toimintaymparisto-ja-tilastot> (Accessed: 28 April 2022).
- Police University College. (2022). *Poliisi (AMK) -tutkinnon opetussuunnitelma uudistuu*. Available at: <https://polamk.fi/-/poliisi-amk-tutkinnon-opetussuunnitelma-uudistuu> (Accessed 11 May 2022).
- Provan, K. and Kenis, P. (2007). 'Modes of Network Governance: Structure, Management, and Effectiveness', *Journal of public administration research and theory*, 18(2), pp. 229–252. doi: 10.1093/jopart/mum015.
- Quarmby, N. (2007). 'Futures work in strategic criminal intelligence', In J. H. Ratcliffe (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 129–147.
- Ratcliffe, J. (2007a). 'The structure of strategic thinking', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 1–11.
- Ratcliffe, J. (ed.) (2007b). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press.
- Ratcliffe, J. (2007c). 'Intelligence research', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 86–98.
- Ratcliffe, J. (2011). *Intelligence-led Policing*. Milton: Routledge.
- Rittel, H. and Webber, M. (1973). 'Dilemmas in a General Theory of Planning', *Policy sciences*, 4(2), pp. 155–169. doi: 10.1007/BF01405730.
- Ruusuvuori, J. (2010). Litteroijan muistilista. In Ruusuvuori, J., Nikander, P. and Hyvärinen, M. (Eds.). *Haastattelun analyysi*. [Online] Tampere: Vastapaino. Available at: <https://www.ellibslibrary.com/book/978-951-768-309-8> (Accessed: 7 March 2022).
- Schreier, M. (2012). *Qualitative Content Analysis in Practice*. London: SAGE Publications Ltd.
- Schwella, E. (2014). 'Knowledge based governance, governance as learning: the leadership implications', *The British journal of leadership in public services*, 10(2), pp. 84–90. doi: 10.1108/IJLPS-05-2014-0004.
- Seppänen, H., Mäkelä, J., Luokkala, P. and Virrantaus, K. (2013). 'Developing shared situational awareness for emergency management.', *Safety science*, 55, pp. 1–9. doi: 10.1016/j.ssci.2012.12.009.
- Seppänen, H. and Virrantaus, K. (2015). 'Shared situational awareness and information quality in disaster management.', *Safety science*, 77, pp. 112–122. doi: 10.1016/j.ssci.2015.03.018.

- Shepherdson, P., Clancey, G., Lee, M. and Crofts, T. (2014). 'Community Safety and Crime Prevention Partnerships: Challenges and Opportunities.', *International Journal for Crime, Justice and Social Democracy*, 3(1), pp. 107-120. doi: 10.5204/ijcjsd.v3i1.135.
- Sheptycki, J. and Ratcliffe, J. (2007). 'Setting the strategic agenda', In Ratcliffe, J. (ed.). *Strategic Thinking in Criminal Intelligence*. Sydney: The Federation Press, pp. 194–207.
- Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (2002). 'Preventing Crime', In Sherman, L. W., Farrington, D. P., Welsh, B. C. and MacKenzie, D. L. (Eds.). *Evidence-Based Crime Prevention*. London: Routledge, pp. 1–12.
- Skinns, L. (2006) 'Flotilla or armada? Interpreting the practices and politics of three community safety partnerships.', *Crime prevention and community safety*, 8(3), pp. 169–187. doi: 10.1057/palgrave.cpcs.8150020.
- Statistics Finland. (2022a). *11lj -- Preliminary population structure by area, 2021M01*-2022M02**. Available at: <https://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/> (Accessed: 22 March 2022).
- Statistics Finland. (2022b). *Offences reported to the authorities by sub-regional unit, 2009–2021*. Available at: https://tilastokeskus.fi/tup/seutunet/tampere_turvallisuus_en.html (Accessed 25 March 2022).
- Sun, X., Dai, J., Singhal, A. and Liu, P. (2017). 'Enterprise-Level Cyber Situation Awareness', In Liu, P., Sushil, J. and Cliff, W. (Eds.). *Theory and Models for Cyber Situation Awareness*. Springer, pp. 66–109.
- Sydänmaanlakka, P. (2015) *Älykäs julkinen johtaminen: miten rakentaa älykäs verkostoyhteiskunta?* [Online] Helsinki: Talentum. Available at: <https://bisneskirjasto.almatalent.fi/teos/BAXBBXATFBCEC#> (Accessed: 31 March 2022).
- Sørensen, E. (2014). 'The Democratic Potentials of Governance Networks in Intergovernmental Decision Making', In Keast, R., Mandell, M. and Agranoff, R. (Eds.). *Network Theory in the Public Sector: Building New Theoretical Frameworks*. London: Routledge, pp. 68–83.
- Tuomi, J. and Sarajärvi, A. (2018). *Laadullinen tutkimus ja sisällönanalyysi*. [Online] Helsinki: Kustannusosakeyhtiö Tammi. Available at: <https://www.ellibslibrary.com/book/9789520400118> (Accessed: 13 March 2022).
- Turunen, A. (2019). *Alueellisen kokonaisturvallisuuden johtaminen ja tilannekuva kompleksisessa toimintaympäristössä; case Kanta-Häme*. Master's Thesis. Tampere University. Available at: <https://urn.fi/URN:NBN:fi:tuni-201907092518> (Accessed: 25 March 2022).
- Valverde, M. (2010). 'Questions of security: A framework for research', *Theoretical Criminology*, 15(1), pp. 3–22. doi: 10.1177/1362480610382569.
- Varto, J. (1992). *Laadullisen tutkimuksen metodologia*. Helsinki: Kirjayhtymä.
- Virta, S. (2019). 'Security', In McLaughlin, E. and Muncie, J. (Eds.). *The Sage dictionary of criminology*. 4th edn. London: Sage, pp. 470–472.

- Warner, M. (2002). 'Wanted: A Definition of "Intelligence"', *Studies in Intelligence*, 46. Available at:
<https://www.cia.gov/static/72b2d4c0d01e4e05c60ff7d37fdd68b1/Wanted-Definition-of-Intel.pdf> (Accessed: 24 March 2022).
- Watson, S. A. (2007). *The Art of War for Security Managers: 10 Steps to Enhancing Organizational Effectiveness*. Oxford: Syngress
- Wheaton, K. and Beerbower, M. (2006). 'Towards a New Definition of Intelligence', *Stanford Law & Policy Review*, 319(17), pp. 319–330. Available at:
<https://law.stanford.edu/publications/towards-new-definition-intelligence/> (Accessed: 24 March 2022).
- Whelan, C. (2016). *Networks and National Security: Dynamics, Effectiveness and Organisation*. Milton: Routledge.
- Zedner, L. (2009). *Security*. Milton: Routledge.

APPENDICES

Appendix 1: English translation of the interview invitation

Dear Sir or Madam,

My name is Teemu Partanen, and I am studying Security Governance at Tampere University. I am currently doing my master's thesis from knowledge-based governance of local security through common situational awareness. The need for the research was identified in co-operation with the director of risk management and security, Jouni Perttula. The research is focused on the development of the security situation in the downtown area of the city.

The security situation of the City of Tampere is facing some challenges according to the safety questionnaire of the year of 2021. Crime, disorderly conduct and substance abuse have emerged as the main issues of the downtown area of the city. This research identifies what are the possibilities of a common situational awareness between varying facets to the development of the security situation of the downtown area. Due to the theme of the research the concept of security is limited to intentionally harmful actions such as crime and disorderly conduct. The main research question is: what kind of possibilities and challenges would be included in the creation of the common situational awareness between the public, private and third sector regarding the security situation in the downtown area of the city of Tampere? The secondary research question is: what kind of information about the security situation is collected by different organisations operating around the issue of security in the downtown area of the City of Tampere?

I wish that you could participate in an expert interview handling the theme of this research as a representative of your organisation. We have selected the recipients of this invitation from the organisations most relevant to the scope of the research in co-operation with the director of risk management and security, Jouni Perttula. Interview consists of 13 questions and the estimated length of the interview is an hour.

Participation to the expert interview is voluntary. All material is handled with confidentiality and the material is used only in this research and the Finnish translation of the research which is produced to the City of Tampere. The interview is recorded and later transcribed to enable the analysis of the results. The identity of the interviewee is not revealed in the research and the represented organisation is identified at the official name level. On contrary to the previous statement, all private and third sector organisations are anonymised (These are identified with terms such as "Private security company A"). All interview material will be disposed after the research is complete and the research is conducted in compliance with the Responsible Conduct of Research. More information at: www.tuni.fi/fi/tutkimus/vastuullinen-tiede/hyva-tieteellinen-kaytanto.

I wish for an answer of your possibility to participate in this research to the e-mail address mentioned below. I will be pleased to entertain any questions!

Best regards,
Teemu Partanen

Supervisor of the thesis
Professor Sirpa Virta

Contact person from the City of Tampere
Director of risk management and security,
Jouni Perttula

Appendix 2: English translation of the interview framework

FRAMEWORK FOR THE INTERVIEW

This interview addresses the security situation in the downtown area of the city of Tampere. In this interview the concept of security is limited to mean being safe from intentional acts, such as crime and disorderly conduct. Accidents and other safety related issues are not addressed in this interview.

SECURITY

- Describe the background factors which in your opinion cause security issues such as crime and disorderly conduct in the downtown area, and how those could be prevented?
- How do you see the role of your organisation and its possibility to have an influence to the security situation in the downtown area of the city of Tampere?

SITUATIONAL AWARENESS AND INFORMATION GATHERING

- What kind of information does your organisation need from the security situation in the downtown area?
- What kind of information does your organisation gather from the security situation of the downtown area / local site you are representing?
- Why is the information gathered?
- Describe the information gathering processes of your organisation from the security situation of the downtown area / local site you are representing?

Who, how, where, frequency / timeliness?

- How is this information handled and utilised in the operations of your organisation?

INFORMATION SHARING

- What other facets have the possibility to use the information your organisation has gathered from the security situation, and to what it is used for?
- How and which other facets could benefit from the information your organisation possess?

Positively? Negatively?

- What kind of an information, and from which other facets, your organisation could use in its own operations?
- What kind of benefits and challenges do you see in this kind of information sharing between other facets?

Own organisation, other organisations, obstacles, publicity, confidentiality, upkeep of information (how / who), requirements (resources / technical implementation)

- Describe the needs, possibilities, and development ideas you see in the common situational awareness between the public, private and third sector in relation to the theme of the security situation of the downtown area?
- Is there anything else you would like to add before we end?