



Preparedness and Emergency Response Management during the COVID-19 Pandemic; Länsi-Uusimaa Department for Rescue Services

Minna Nikola

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Services**

Minna Nikola
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This thesis investigates the effects of the pandemic on the daily operations of the Länsi-Uusimaa department for rescue services. The main objective of this thesis was to discover how the Länsi-Uusimaa department for rescue services dealt with the novel COVID-19 pandemic and the situation under the state of emergency. The purpose was to study what was the stage of preparedness for an unexpected crisis and how they succeeded the situation.

This qualitative study used both primary and secondary data collection methods. The research was done by analysing what has already been documented about pandemics and in a central what has been written about preparedness and rescue services duties in the state of emergency. To collect information for benchmarking, in addition to Länsi-Uusimaa rescue department four other rescue departments in Finland were interviewed with semi structured interviews. The answers from all five departments were then compared and analysed reflectively to the literature.

Indeed, the COVID-19 is a different kind of pandemic compared to any of before and therefore there is not a similar case where to reflect this occasion. The main sources supplying information about pandemic prevention in a global and national scale were used. Sources include the World Health Organization and Finnish institute for health and welfare, amongst others. Information of preparedness and crises management were mostly studied from publications and alignments of the Finnish government and what has been regulated in laws and regulations for authorities.

The results show that despite the pandemic Länsi-Uusimaa rescue department could produce all required operations and services detailed in the service level agreement. The changes included the protection procedures at the workplace and while out on calls, fire inspections were cancelled for the spring, administrative workers started to work remotely, and meetings were held online. The study provides a summary of how Länsi-Uusimaa rescue department managed when put in comparison with the four other rescue departments and shows some recommendations to be considered in a future preparedness plan.

Keywords: Preparedness, Emergency Response Management, Crisis Management, Pandemic

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Opinnäytetyössä selvitetään pandemian vaikutuksia Länsi-Uudenmaan pelastuslaitoksen päivittäiseen toimintaan. Tämän tutkimuksen päätavoitteena oli selvittää, miten Länsi-Uudenmaan pelastuslaitos toimi uuden COVID-19-pandemian, sekä poikkeustilan aikana. Tutkimuksen tarkoituksena oli kartoittaa organisaation varautumisen tasoa odottamattoman kriisin kohdatessa ja miten organisaatio suoriutui kriisin hoidossa.

Tässä kvalitatiivisessa tutkimuksessa hyödynnettiin sekä sekundaarista, että primaarista tiedonkeruu menetelmää. Tutkimuksessa analysoitiin sitä, mitä pandemioiden osalta on jo dokumentoitu, ja keskeisessä tilassa, mitä valmius- ja pelastustoimen tehtävistä on säädetty poikkeustilan vallitessa. Vertailutietojen keräämiseksi Länsi-Uudenmaan pelastuslaitoksen lisäksi haastateltiin neljää pelastuslaitosta Suomessa puoli strukturoidulla haastatteluilla. Tämän jälkeen kaikkien viiden pelastuslaitoksen vastauksia verrattiin teoriaan reflektoiden.

Covid-19 on vakavuudessaan ja laajuudessaan erilainen pandemia kuin mikään aiempi, ja siksi siihen ei löydy täysin vastaavaa ja vertailukelpoista tapausta. Tietolähteinä pandemiaan varautumisessa ja ehkäisyssä käytettiin tärkeimpiä kansainvälisiä, sekä kansallisia lähteitä kuten Maailman terveysjärjestöä WHO:ta ja Terveystieteiden ja hyvinvoinninlaitosta THL:ää. Tietoa varautumisesta ja kriisien hallinnasta kerättiin enimmäkseen Suomen hallituksen julkaisuista ja linjauksista, sekä mitä viranomaislaeissa ja asetuksissa on säännelty.

Pandemiasta huolimatta Länsi-Uudenmaan pelastuslaitos pystyi tuottamaan palvelutason päätöksen mukaista palvelua ja valmiutta kuntalaisilleen. Muutoksia tuli suojamenettelyihin työpaikalla, sekä pelastus- ja ensihoitotehtävillä, valvonta toiminta keskeytettiin kevääksi, hallinnollisen puolen työntekijät siirtyivät enimmäkseen etätöihin ja kokoukset sekä tapaamiset siirrettiin pidettäväksi etäyhteyksien välityksellä. Tutkimuksen tulokset antavat yhteenvedon siitä, miten Länsi-Uudenmaan pelastuslaitos onnistui verrattuna muihin vastaaviin pelastuslaitoksiin. Yhteenvedossa on koottuna suosituksia, joita tulisi ottaa huomioon tulevassa valmius- jatkuvuussuunnitelmassa.

Avainsanat: Varautuminen, Valmiusjohtaminen, Kriisinhallinta, Pandemia

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1 Introduction

Europe has experienced pandemics before, teaching the member nations to develop a preparedness against emerging and re-emerging epidemics project (Europa 2017). When the Coronavirus started to spread in Europe in March 2020, the size and severity surprised all nations and businesses, and organisations. The virus spread fast and many nations had to restrict individual's freedom to travel and spending time outside by placing restrictions. Finland placed into force the State of Emergency Act on March 16, 2020 and from there on the impacts on businesses economies and people's personal economies have been massive.

The following is a research-based development study where the case organisation is Länsi-Uusimaa Rescue Department. The curiosity toward this topic was awakened during the Spring 2020 when the novel coronavirus (COVID-19) was spreading rapidly worldwide and reported findings and management plans were becoming more freely available. This has had some impact on authorities' operations and therefore the topic seemed fascinating to study further.

The framework for this study was planned together with the Länsi-Uusimaa rescue department. As the time went forward the situation changed constantly, and Länsi-Uusimaa rescue department realized the need for a report of the decisions and actions of COVID-19 timeline. The organisation is aiming to improve their pandemic preparedness; therefore, this was a good opportunity to conduct a development research.

This study aims to finding out what kind of requirements exist from different institutions for the rescue departments. For this purpose, the methods chosen were qualitative methods meaning secondary data collection, semi-structured interviews, and benchmarking. The literature for secondary data collection consisted of the official publications from the World Health Organisation to the Government releases and Finnish law. The two more important methods considering the outcome were the interviews and benchmarking. The interviews were successful as all the five departments important for the study agreed to take part.

The results show that none of the departments were prepared for this severe a pandemic but also that all of them could produce a strategy based on their existing preparedness plan and that the processes and operations did not suffer from the situation. This study will supply recommendations for pandemic preparedness, and it is up to the organisation whether to use them. The study will not supply a preparedness plan or guidelines whatsoever but improvement ideas for them consider for future development and preparedness plans.

1.1 Organisation

Länsi-Uusimaa rescue department supplies rescue services in one of the 22 regions in Finland and is part of City of Espoo Organisation. It is a non-profit organisation and responsible for the security of its domain, having 12 full-time fire stations and more than 40 voluntary fire brigades throughout ten different municipalities which are Espoo, Hanko, Inkoö, Karkkila, Kauniainen, Kirkkonummi, Lohja, Raasepori, Siuntio and Vihti. It supplies rescue and emergency medical services as well as safety consulting for residents, municipalities, and businesses. (Länsi-Uudenmaan pelastuslaitos 2020a.) Figure 1: Organisation chart of Länsi-Uusimaa Rescue Department, created by author, illustrates the organisation chart and the areas of responsibilities. Personnel of around 600 employees consists of frontline responders like emergency medical personnel, divisional officers, sub-officers, and firefighters who are in constant preparedness around the clock. In addition, there are fire prevention unit including fire inspectors and safety trainers, situation centre personnel, human resources as well as administrative staff.

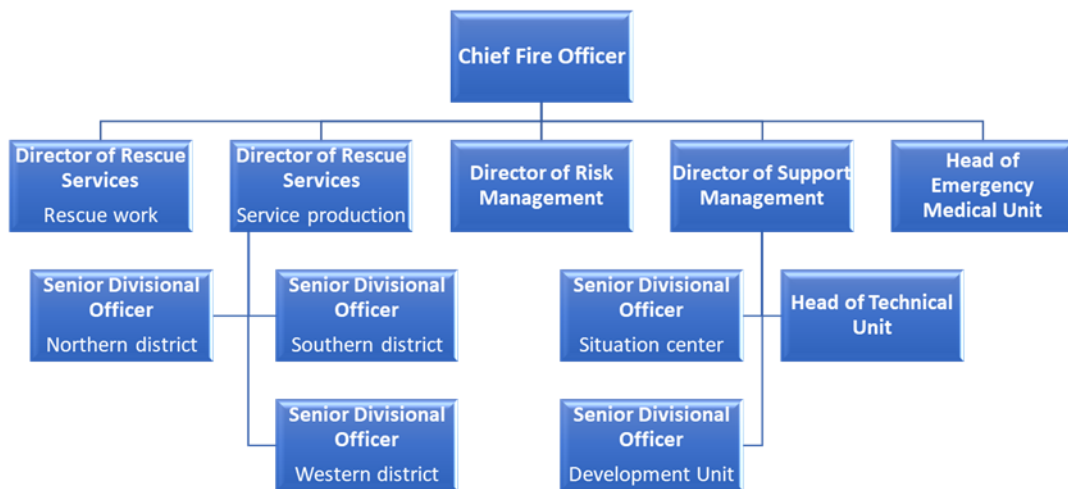


Figure 1: Organisation chart of Länsi-Uusimaa Rescue Department

In 2019; paramedics responded to 42 506 calls in Länsi-Uusimaa region and the increasing number of calls creates challenges for their wellbeing. Rescue services responded to 7608 different kind of duties like car accidents, fires, storm damages, automatic fire alarms and environment disasters. Additionally, they performed 2 204 first response duties together with voluntary rescue services. (Länsi-Uudenmaan pelastuslaitos 2020b.) The ongoing coronavirus has caused minor deficits on resources and that way increased the burden even more.

1.2 Objectives

The objective for the thesis is to examine Länsi-Uusimaa rescue departments preparedness for pandemics. If there was a functional action plan, did it encompass pandemics at this extent, was it used and how effectively. This study reflects operations that has been done in this rescue department to literature that has been written about preparedness and emergency response management as well as what is regulated in laws and the given recommendations from the health organisations. To collect best practices, which will be used later, some professionals from comparable rescue departments have been interviewed. Objective for the thesis has been to collect a good scale of theory base and different practices used in other rescue departments to prevent coronavirus spreading. Länsi-Uusimaa rescue department recognizes the need for a compendium of how things escalated, and the response made, and what could be improved for future cases. The study will not address what was lacking but to highlight development aspects.

To keep the objective in mind, the method called “SMART” was used and revised along this writing process. This method has been used in many sources discussing about writing projects and Murray (2011) simplifies in her book that the letters come from S=specific, meaning that the outcome is detailed enough to be measured and convincing, M=measurable, A=achievable, R= realistic and T= time scaled. (Murray 2011, Goal setting.) An article “SMART Goals” from Mind Tools (2016) explains how to use the smart methods. Answering to the five “W” questions will make the goal specific. These questions are as follows; What will be carried out? Why is it important? Who is or are involved? Where is it placed and which resources or delimitations are involved? The goal is easier to achieve if it can be measured and to find out how it can be measured the questions of how much, how many and how do I know it is achieved are relevant. The goal should be achievable, in other words it needs to be realistic. In the Mind Tools (2016) article the “R” refers to relevant. It differentiates in this the article in that it asks; Is the goal worthwhile? The last letter “T” sets the deadline for the goal.

2 Background information for preparedness and planning

This section allows the reader to examine the theory base which was used for this thesis. Information was collected from web-based materials, like e-books and organisations publications on their webpages. Both national and international sources have been used to collect broad but targeted dataset. The essential concepts in this study are COVID-19, preparedness, continuity management and emergency response management. These concepts are explained in the following chapters which also supply information within context to the case organisation. Some of the rescue departments material is not available for the public and they cannot be described in close detail. For example, this study will not give specifics of

the rescue departments continuity management plan and preparedness plan, nor the formation of the resources. It is important to mention that this lack of certain information will not affect the outcome of the study and was done so in agreement and by requirement of the case organisation.

The case organisation, and other observed similar organisations, follow the recommendations provided by the World Health Organisation (WHO) and especially the Finnish institute for health and welfare (THL). Finnish legislation sets obligations and requirements when it comes to rescue departments preparedness and emergency response management. Laws, decrees, and institutions which are relevant during this pandemic time for rescue services are collected into a mind map that can be found in Figure 5: The activities of a rescue department are influenced by many regulations and institutions. This will be discussed more in chapter 2.7. It was essential to examine and understand the legal aspect for the processes (Act on Information Management in Public Administration 906/2019) to measure whether the rescue department were able to fulfil its requirements.

Few words about similar studies that have been conducted on the topic considering preparedness to compare their results with this study. Designing a preparedness plan is currently a hot topic for thesis papers in my field of studies, especially for medium to large companies and organisations. Some companies do not have any kind of preparedness or continuity plan and in some companies, they need an update. The results of these theses reveal that the plans will be brought in use at once or the near future.

2.1 Pandemic and COVID-19

A pandemic is a disease outbreak which has spread worldwide. It usually has a profound influence on the world economy, throughout all sectors. A novel pandemic disease spreads easily from person to person as there is only little or no immunity to the virus. (OSHA n.d.) COVID-19 is the common term referring to the virus called SARS-CoV-2. The origin of the virus has been tracked to Wuhan, China and research shows it started there in late December 2019 when sudden pneumonia cases started to arise (World Health Organization 2020a). On the 30th of January, the virus arrived Europe and WHO declared a public health emergency of international concern. Coronavirus is a group of viruses causing respiratory infections, either common or more severe cold, fever, headache, and fatigue. The symptoms and severity vary but it is known to be dangerous to elderly and people with other illnesses to whom it can cause pneumonia, organ failure and even death. Transmission happens through droplets when infected person coughs or sneezes close to another person, but it can also be caught through objects. (World Health Organization 2020b.)

In Finland, the coronavirus started to spread in the early March, first in the Southern Finland and then slowly in other regions. The numbers of contaminations increased rapidly and on the

28 of March Uusimaa region was closed off (Ministry of the Interior 2020a) from other parts of Finland to prevent the virus spreading into the other parts. The reason for this was that the capacity of some medical centre's intensive care unit, of some areas in Finland, would not be sufficient if the virus would spread as badly as in the metropolitan area (Muhonen & Pikkarainen 2020).

The article titled 'Are we there yet?' (Fakhruddin, Blanchard & Ragupathy 2020) about the COVID-19 pandemic transition from response to recovery phases strongly suggests that for an effective recovery, the pandemic response requires international collaboration and efficient information dissemination. Figure 2: Phases of the COVID-19 pandemic, illustrates how the pandemic progresses in escalating waves and shows corresponding help in transition through recovery phases.

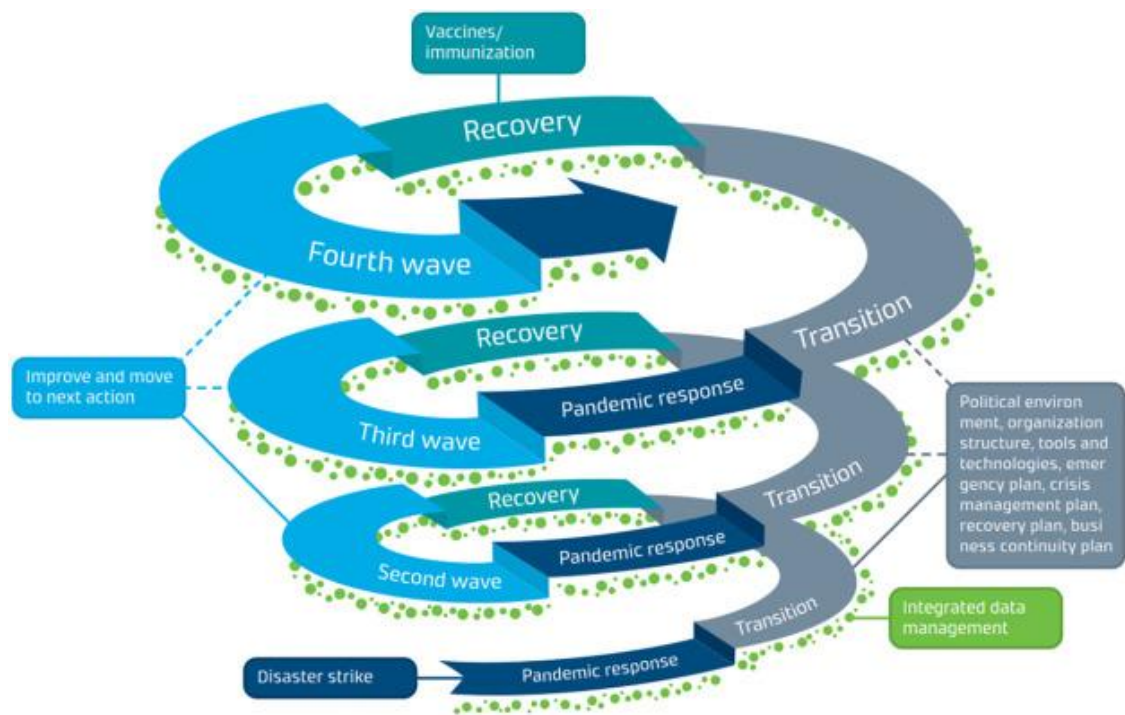


Figure 2: Phases of the COVID-19 pandemic (Fakhruddin, Blanchard & Ragupathy 2020.)

2.2 Emergency response management

Emergency response is often associated with emergency situations like accidents and catastrophes which happen unexpectedly causing destruction and injuries. Therefore, studies about emergency preparedness and response management seem to concentrate on these topics like the great amount of literature provided in FEMA's website (Federal Emergency Management Agency n.d.). In today's world the risks and threats are presented from far more complex things like cyber threats, terrorism, and pandemics. There are ways to keep a hostile person from entering a building or plan premises so that in the case of a fire the automatic

extinguisher systems activate avoiding a greater destruction and then insurances cover the losses. The number of cyber threats and attacks has been increasing (Horelli 2020) and businesses have begun to realize how vulnerable they are and for that reason hiring professionals to handle data protection. An important question to raise, is how to stop a virus spreading among the most important assets, personnel.

Throughout history there have been pandemics such as Influenza A virus subtype H1N1 in 2009 which made organisations to re-evaluate their business continuity plans (Europe WHO 2020). However, that was over ten years ago and not in a short memory anymore. That might be a reason, together with a fact that the size of this novel coronavirus surprised us all, that pandemics were not in a top priority when making risk assessment.

The table in the figure 3 is part of the Centers for Disease Control and Prevention, CDC, (Centers for Disease Control and Prevention 2018) national standards publication showing the model of three steps for preparedness and response capabilities planning. It shows the parts to be highlighted when jurisdictional health agencies are developing their emergency preparedness and response processes. Some of these steps from each section are examined closer to mirror this model to the case organisation. The first section, showing the current state, Step 1b Access Resource Elements stands for a key role. The accelerating spread of the coronavirus has caused, and will cause, deficits for the resources of the frontline responders.

Under the second section, Step 2a Identify and Review Jurisdictional Inputs will be handled more in chapter 2.6 which explains the laws regulating the responsibilities of the rescue departments. Step 3a Plan Organizational Initiatives under section three is an ongoing topic because of the HIKLU project. The four departments in Uusimaa region; Helsinki, Itä-Uusimaa, Länsi-Uusimaa and Keski-Uusimaa, will unite in the future and the planning phase is already far so therefore this pandemic will undoubtedly bring up new suggestions and initiatives. This project is however outside the scope of this study. More information of HIKLU project can be found from Helsinki-Uusimaa Regional Councils website. Similarly Step 3b Plan Capacity Building and Sustain Activities is under development for the reason of increased migration to the capital area (Suomen virallinen tilasto 2020).

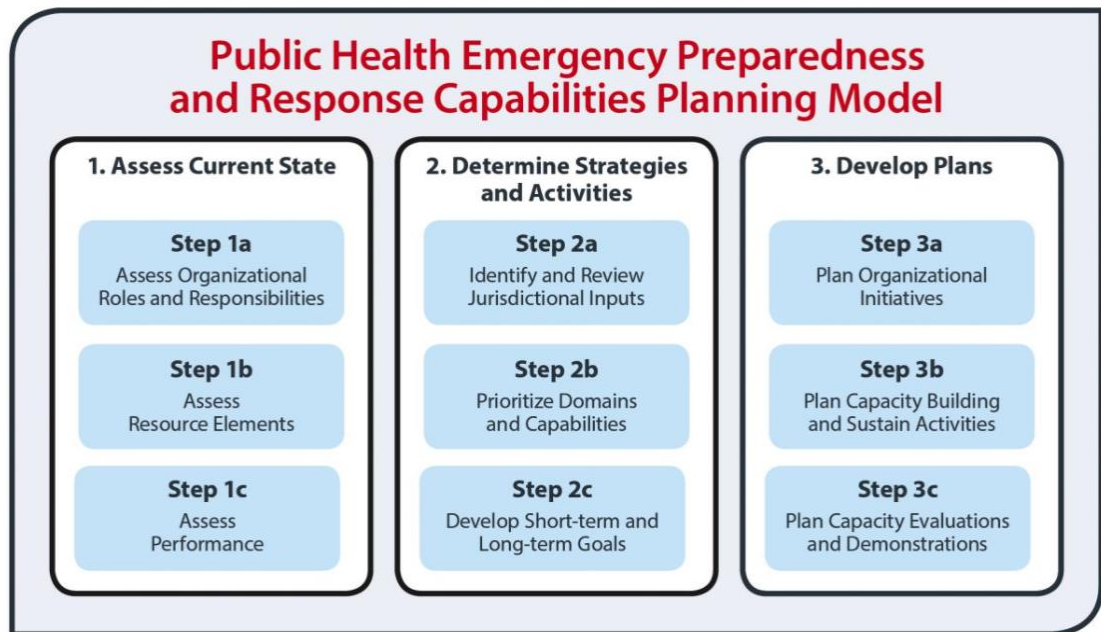


Figure 3: A planning model for emergency preparedness and response capabilities. (Centers for Disease Control and Prevention 2018.)

Literature that has been targeted to businesses does not seem to take epidemics into concern as such but as a risks or emergencies they do mention loss of key personnel. Reviewing several books about emergency response management they emphasize the four phases when compose the plan for emergency response. These phases are mitigation, preparedness, response, and recovery (Wayland 2015, 27). The words are often placed into a cycle to describe them as an ongoing process.

Wayland (2015, 3) refers to the planning to be a continuous process where the organisation continuously finds risks, sees the situation, and makes corrections to mitigate risks. Figure 4: Emergency response planning process consist of four phases, created by author, presents the information using Wayland's description and illustrations of the cycle of risk management. At the time of writing, Finland is experiencing the second wave of the COVID-19 pandemic managing the response phase and working towards getting back to the recovery phase. According to Wayland (2015, 3), response covers actions, processes and procedures that needs to be done when the emergency begins.

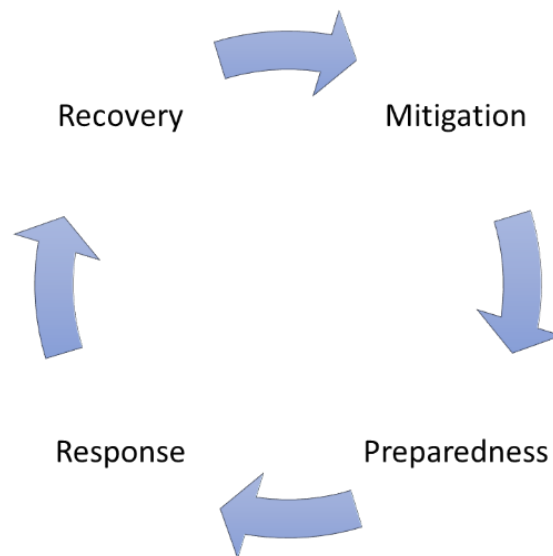


Figure 4: Emergency response planning process consists of four phases.

2.3 Preparedness

The Security Strategy for Society (The Security Committee 2017) explains that preparedness involves procedures taken to ensure that tasks can be carried out without disruptions and necessary actions in abnormal situations. The Rescue act (379/2011) and Emergency Powers act (1552/2011) requires organisations to support their preparedness. The process of preparedness is explained in the Security Strategy for Society as follows; The planning phase takes into concern the vital functions, risk assessment, resource assessment and researching and developing. The activities consist of training, rehearsal and testing, crisis management, communications, and continuity management, use of resources and recovery, and finally analysing the disturbances and learning from them. The process will be evaluated and measured to be reassessed and improved. (The Security Committee 2017.)

VAHTI (2/2016) defines that guidelines of the control of continuity of operations plan should ensure the centre of the organisations processes without disruption. The plan is part of the organisations overall safety which includes safety management, risk management, contingency management, managing disruptive situations, formulation situational picture and security of supplies and preparedness (Valtiovarainministeriö 2016). The Security Strategy for Society (2017) adds training to that previously given list.

Preparation for any disruptions within an organisation starts with making a continuity management plan or an emergency response plan. Plans should focus on recognizing the risks and threats and how they could affect the functions of the organisation and its assets, and then produce a mitigation strategy (Al Hour 2012, chapter 1). Preparedness typically consists of documents which include procedures and guidelines how to act in a case of an emergency,

this document usually has roles and responsibilities for the employees, and it should be clear and easily understood (Wayland 2015, 28). This will be further investigated by the interview with the case organisation.

2.4 Pandemic preparedness

It has been seen during this study that different channels of communication provide varied information of this novel pandemic and at times it is hard to keep up with the new instructions as the pandemic evolves quickly. Additionally, the Finnish government and THL issue new recommendations often depending on the current situation. Preparedness for a pandemic or associated disaster can require massive organization efforts. Pandemic preparedness plan should consider that 25-35% of the workforce may be absent for one to two weeks due to illness and in addition to that a child's illness can cause employees staying at home the same amount of time and these absences are spread over a period of two or three months (Ministry of Social Affairs and Health 2012, 75).

An official website of United States Government, Ready (2020), has listed things to do before, during and after the pandemic. In addition to keeping good hand hygiene, use of masks and social distancing, few important pickings that do not come to one's mind that easily are a reminder of awareness and vigilance towards any fraudulent criminals are reported to take advantage of this distressing situation. Sharing only correct information is encouraged since it is normal to feel anxious during this time. The amount of cyberthreats increased significantly on March 2020 when the coronavirus started to spread rapidly, and cybercriminals took advantage of the situation (F-Secure 2020).

It has been noted by the author during the preparation for this thesis, that despite having historical workplace preparedness plans for an influenza pandemic published by The U.S. Occupational Safety and Health Administration, the U.S. has still suffered during this coronavirus outbreak.

2.5 Authorities preparedness

Rescue departments play a vital role in securing private and public sectors and citizens safety. Rescue and emergency services are provided through out a year and 24/7 so the functionality cannot be emphasized enough. Normal operations of rescue services are being secured by reinforcing the personnel according to predeveloped action plans and arrangements during the state of emergency. (Pelastustoimi n.d.) In a publication from the Ministry of the Interior, Kopare (2007) has compiled a precept for rescue departments aiming to give consistent foundation to devise and develop their preparedness plan. The centre of the gravity of the preparedness plan is preparation for disasters and emergency conditions. The meaning of the preparedness plan is to ensure that rescue services are fully functioning

even in a state of emergency so that no harm is caused to civilians or property because of deficient preparedness action plan. Preparation of a preparedness plan is best conducted in cooperation between authorities and communities of a rescue departments region. (Valtiovarainministeriö 2016.)

The following subsections play a vital role in the rescue departments preparedness. External operating environments needs to be taken into concern when setting the goal and assessing the risks. In this context VAHTI (2/2016) mentions some key factors influencing the organisational goals. Among these risks, epidemic mentioned and the measures in other sectors of government, such as legislation, are explored further in the sections bellow.

2.6 Laws related to pandemic preparedness and rescue services

Regional rescue departments are responsible of the standard of operations and proper organisation of the rescue services. They must take care of the guidance and safety communications which aim to prevent fires and accidents and enhance the preparedness of protecting persons from accidents and limiting the consequences. In addition, they may provide emergency medical services if agreed with the joint municipal board of the hospital district. The regional fire department decides about the standard of service in response to the municipality. (Rescue Act 379/2011.) This is discussed later in section 2.7.

Operations under the Rescue Act must be planned and organised so that they can be carried out also during the state of emergency under the Emergency Powers act. The Emergency Powers Act (1552/2011) defines the mandate of the authorities during exceptional times. This also sets the preparedness level for authorities. It can be justified for Authorities to use only certain jurisdictions which are then considered necessary.

Encouragement of cooperation, leadership and information sharing is essential in a fault situation. In such a situation, where citizens lives become threatened and the risk of endangerment of the society increases, the government can decide to bring in the Emergency Powers Act. The Finnish government, together with the President of Finland, decided to bring in Emergency Powers Act on the 16 of March 2020. This state of emergency lasted until the 15 of June, at which time the government informed the emergency conditions no longer existed. (Hakala 2020.)

The Communicable Diseases Act (1227/2016) section 3 part 7 states that “exceptional epidemic refers to a pandemic declared by the World Health Organisation, or other communicable disease outbreak or epidemic which constitutes a significant threat to public health and the adequacy of health care services”. The WHO Director General told on the 11 March 2020 that the coronavirus can be characterized officially as a pandemic in a news publication (World Health Organization 2020c). The rescue departments role regarding the

Communicable Disease Act is described in chapter 2 section 6 as follows: “[...must systematically combat communicable diseases and be prepared for disruptions in health care. They must take immediate action when informed of a communicable disease or the risk of such a disease within their responsibility area, which requires control measures.”

2.7 Institutions directing and supervising rescue departments

Rescue operations are statutory official activities and the key partners for rescue departments are municipalities, other authorities, voluntary fire brigades, supportive organisations, and other businesses (Pelastuslaitosten kumppanuusverkosto 2020). Figure 5: The activities of a rescue department are influenced by many regulations and institutions, created by author, illustrates the interconnected map of entities involved. The role of the Ministry of the Interior is described in the Rescue Act so that it leads, controls, and checks the rescue, operations including the availability of its services and their quality. It also takes care of the national preparations and arrangements, coordinates the actions of different Ministries and lines of businesses on rescue services and its development. (Rescue Act 379/2011.) The Ministry of the interior develops the operations of the rescue departments and plans reforms every now and then. In 2016 they set up a publication called A safe and resilient Finland - Rescue Services Strategy 2025, which has a vision for the next few years. (Ministry of the Interior 2020d.)

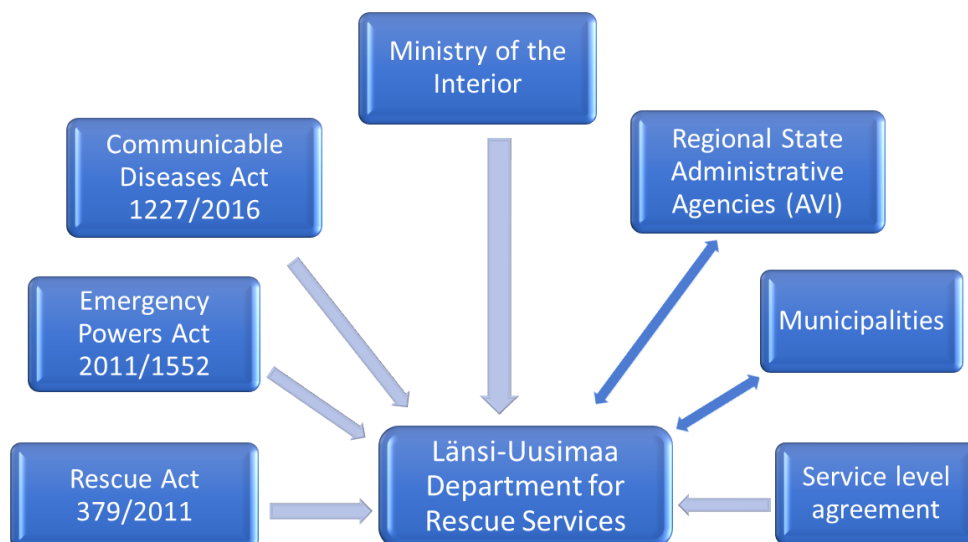


Figure 5: The activities of a rescue department are influenced by many regulations and institutions.

In addition to what is provided by the Rescue Act (379/2011) the government legislation on rescue services (5.5.2011/407) regulates that the Regional State Administrative Agencies (AVI) duties are to report to the Ministry of the Interior on the availability and the level of the

rescue services. AVI is also obliged to promote the cooperation between different parties in rescue operations within their area of responsibility.

The city of Espoo is the employer of the Länsi-Uusimaa rescue department following the Rescue Act (379/2011) chapter 4 section 24, which outlines that municipalities handle the rescue operations together with the regional rescue department. Municipalities can play a crucial role in abnormal situations, and so they define the instructions for their employees and rescue departments to act according to the instructions. In addition, the rescue departments can draw other instructions of their own. It is also the responsibility of the municipalities to make sure rescue departments do not spread the coronavirus and operations are secured by doing necessary rearrangements for resourcing if needed. (Ministry of the Interior 2020b.)

Service level agreement (2014-2018) defines the level of the services provided by the rescue department in its service area. It forms a foundation for the goals and development procedures. The service level agreement presents six main goals for the rescue department. The first being to promote the disaster preparedness by arranging practices and to keep strategies and guidelines updated. The second goal presents the mission to secure operations continuity even in a state of emergency. This includes supporting and guiding the stakeholders and municipalities operations continuity planning. The third goal aims to improve the state of self-preparedness of the stakeholders and increasing and improving safety communications, while taking multiculturalism into account. Supplying quality and cost-effective service is the fourth goal and ensuring of wellbeing and competence of the personnel the fifth. The final goal is for the rescue department to unify the emergency care services.

The service level agreement (2014-2018) describes an abnormal condition as a threat or occasion that endangers the safety of the society, performance or viability of the residents, and which management needs broader or closer cooperation and communication than normally expected from the authorities and other actors.

Rescue services management system and preparedness for disruptive situations is based on day-to-day preparedness, which is reinforced or extended, as necessary. Cooperation with municipalities and authorities is practised regularly. The aim of the service level agreement for this theme was to secure and support that the personnel, fire stations and the equipment are functional also during the abnormal situation or in a state of emergency.

2.8 WHO, THL and HUS

The World Health Organization (World Health Organization 2020d) guides and supports nations combating against illnesses and works hard to promote health and wellbeing worldwide. As

the threat of serious pandemics increases, the WHO together with the European Centre for Disease Prevention and Control (ECDC) and the European Community admonished their member states to update their pandemic preparedness plans and supplied guidelines to be followed. The newest version of Pandemic influenza risk management guidance has re-examined the earlier version and brought up things to be developed since the influenza A(H1N1) pandemic in 2009. (World Health Organization 2017.) The infection with coronavirus is not the only a risk among people who must expose themselves for it while on their job. The World Health Organization (2020e) brings up physical and mental health risks that can be fatigue from heavy workload, prolonged work with personal protective equipment, skin damage, stigmas at the workplace, emotional distress, and burnout.

The Finnish institute for health and welfare (THL) works under the Ministry of social affairs and health and is an independent expert agency supplying guidance and support for decision making. THL serves many parties like the government, municipalities, organisations, and actors in the social and healthcare sector. They conduct research, watching and developing measures to promote the wellbeing of Finnish society. (Finnish institute for health and welfare 2019.) THL supply vital information to rescue departments and is a source of information when it comes to recommendations how to protect oneself and others against the coronavirus. The paramedics are still in contact with coronavirus patients during every work shift but by protecting themselves as instructed by THL and Helsinki University Hospital (HUS) they have remained healthy. HUS is Finland's largest health care provider and the second largest employer. They have nationwide responsibility to do research and supply centralized care for severe and rare illnesses. THL and HUS work in cooperation in research development. (Helsinki University Hospital 2020.)

3 Methods

This section aims to detail the methods in further detail. All data used to conduct this study came from literature and interviews and there was no need to use numeric data. For this reason, qualitative methods were chosen for this thesis allowing for more freedom for different points of view and considerations.

This study used both primary and secondary data collection methods. Primary data collection means that the information was collected using the primary sources, which in this study were interviews. Collection of secondary data involved reviewing published data from various sources to collect a basis for the theory. The advantage of combining these methods is to get comparative and up-to-date data by using the same question pattern for the interview and with the help of secondary data to reinforce the reliability for the result. The disadvantage with using interviews as primary data is that the original data cannot be repeated. Therefore,

according to Saunders (2015), the answers of the interviewees might, and will, change as the time goes by. In order to find out the best practises to prepare for and protect against a pandemic the activities of the case department were benchmarked against the other rescue departments.

The collected information was checked to ensure it corresponded to the purpose and requirement for information. Ojasalo, Moilanen and Ritalahti (2015, 31) writes about the source criticism towards the information, especially when web-based sources are used. As seen from the earlier chapters; the themes of the theory, in parts, concentrate only to few topics relevant for the study. Collection of the data started by conducting research on the COVID-19 virus and its effects. Next, getting to know the principal guidelines provided by international and national organisations about prevention methods and advice guidelines for the spread of viruses. Furthermore, the information of organisations ways to avoid risks were studied. After, the interviews and studying of the theory the data was analysed. Using all these methods, combined, supply quality evidence for the data analysis section to reach a convincing study outcome (Ojasalo et al. 2015, 40).

3.1 Secondary data collection and document analysis

According to Saunders (2015 Chapter 8), analysing secondary data involved going through existing databases of media publications, news articles, journals, and other sources which have already been published and then using them to increase the credibility for this study. Being a case study, this thesis required searching information of similar cases and studying theory around the topic which in this case focuses on pandemics and pandemic preparedness. According to Ojasalo et al. (2015, 37) a case study supplies a good approach to learn more about the organisation's situation, and issues existing, and by using the researched data, produce development aspects. Document analysis covers publications, webpages, annual reports, and other documents used in the case organisation (Ojasalo et al. 2015, 43). Document analysis is often connected to other information collection methods (Ojasalo et al. 2015, 43) and like in this study many of the rescue departments internal documents are not public.

The aim was to use systematic data collection by starting to map the literature around the topic; for example, what is said about the COVID-19 on authorized sources like WHO and THL. To be able to ask the right questions, the theory related to the preparedness of the rescue services needed to be clarified. There are many laws defining the processes of the rescue services but only the laws needed for this study were introduced. In addition to laws and regulations Länsi-Uusimaa department for rescue services follows a service level agreement which will be discussed in more detail during the interview with the representative of Länsi-

Uusimaa rescue department. The result section of this thesis will express an objective opinion on whether the department met the goals set on the agreement.

Sources of literature were limited due to the quantity of information concerning COVID-19 at the time of writing, many of which also include conjecture, misinformation, or propaganda like material which weighed on the quantity and quality of sources. A report from the World Economic Forum (2020) uses a term digital wildfire when it speaks about the seriousness of spreading misinformation. The term the report uses describes how it can be comparable to a wildfire that spreads uncontrollably causing destruction. Similarly, the rumours around the pandemic have caused difficulties for people to decide what to believe (European Parliament 2020).

The literature for secondary data analysis amplifies the obligations of rescue service providers. Some instructions that departments are obeying are their internal norms which could not be shown in this paper.

3.2 Benchmarking

Benchmarking is often used method when a company wants to take a lead on a market and bring even better products or services to the market than the competitors. The storyline goes so that the company does research what the competitive businesses offer and take the elements from them to create a better product. Ojasalo et al. (2015, 43) points out that businesses may at times conduct benchmarking to an entirely different business area. However, Ryus et al. (2010, chapter 4) reminds that selecting completely different company to conduct benchmarking might not supply proper results and may lead to unrealistic expectations. With benchmarking, the aim is to compare the organisations and their procedures and then pick the procedures which could supply value for the case companies processes. Tuominen (2016) summarizes benchmarking as "understanding your own and your partner's processes is a prerequisite for being able to adopt the best practices into your own environment." Benchmarking does not always aim for being better than the other one. In this study the benchmarking method is used to find out if the case organisation is missing some practises which are proven to be good in other departments.

The Finnish Government has launched a reform which aims to improve rescue services. The Government is scheduled to give a submission to Parliament concerning the reform of the rescue services in December 2020 and one of the objectives is developing the operations of the rescue services to work as a national system. (Ministry of the Interior 2020c.) To improve the operations and cooperation between the departments and to supply same level service, a benchmarking method still is an effective way to gather the best practices from all compared departments and then implement the processes to all departments. That would improve the performance gradually although the development should be a constant cycle.

The answers of the interviews were compared and analysed to find out gaps and differences. If differences were found, this presented a reason for further investigation and discussion with the case organisation. Going through the answers gave an idea to compare them in a chart which can be seen below in Figure 6: A comparison chart of the rescue departments. The idea of the chart will be introduced in the results.

3.3 Semi structured interviews

A semi structured interview was chosen for this study as the subject stays delimited but enables the interviewees to give other information for their answers. Questions were formatted to be align with the topic and to answer to the need for the study. In semi structured interview the questions are the same for all participants and the way the questions are formed ensures the focus is still on the topic. There were eleven questions in total divided in four themes. To be able to conduct a comparative analysis for the answers, the interviewees are provided by supplementary questions, adhering to Gillham's recommendations towards a Range of Techniques (2005, 70).

To get back to the objectives of finding out the procedures during the state of emergency the questions were compiled to handle these topics. When planning the questionnaire, it was clear that the respondents, being working professionals, had busy schedules and therefore the purpose was to produce as clear and compact questions where the interviewee can answer either shortly or broadly depending on her or his own will. Independent from the length of the answers, the information would be important and comparable to the case organisations processes and to the background theory.

Following governmental and case organisational guidelines and the time of occurrence, all interviews were planned to be conducted remotely and the questions would be sent to the interviewee beforehand enabling them to study the questions in preparation. In addition, the question form had background information of this study so that the interviewee would be aware where the answers would be used. After their acceptance, a phone interview would be agreed. Gillham (2005, 12) highlights in his book *Research Interviewing: The Range of Techniques* the importance of letting the interviewee get to know the background of the research to avoid the uncomfortable feelings of not knowing what they are putting themselves into. Before the interview, permission to record the conversation was asked, with the explicit condition that it would be not be kept. The recordings were transcribed right after the interview, and then destroyed to ensure it would not get exposed to outsiders.

All interviewees would be allowed to remain anonymous and then the answers would be in a format of Department 1, Department 2 etc. To avert the interviewees avoidance answering the questions the theory of conducting an interview was studied carefully. Roulston (2011) talks about the challenges of a proper interview and the analyzation of the answers. In her

article she interviewed a focus group and produced problems cooperating with the participants. Her suggestions to improve the quality of an interview is to use individual interviews instead of groups and being as transparent as possible with the means of the interview. Again, Gillham (2005, 27-28) mentions the resistant factor with email and phone interviews as these channels are loaded with nuisance messages and therefore there is a high possibility to have a negative response for an interview request. Therefore, an open approach was again called for.

Before the questions were sent outside to the other departments, a trialling was conducted with a representative in Länsi-Uusimaa rescue department. Trialling involved making a first attempt with the questions which were to be used in the interview, towards someone associated with the research but not a part of a target group to be used in the interview. (Gillham 2005, 22.) Trialling the questions supplied experience on how the interview would go, writing down the information given, and parts needing to be changed.

The advantages of telephone interview are that it can be done anywhere and is easier than having face-to-face meeting to find available time. Besides being time effective, it is also highly recommended now to use either phone calls or video connections provided by Teams or Skype. Talking directly with a person allows to hear the reactions compared to email interview. Disadvantages of a telephone interview are that the interviewee might be hurried, lacking focus and therefore the answers may lack in content and can also be easily cancelled.

4 Results and key findings

Despite of their busy schedule, it was possible to get an interview from each of selected rescue departments successfully. The interview questions are provided in the appendix 1. This section describes the results of the interviews and analyses what decisions led to the actions taken and what issues arise. The interview techniques seemed to work well because the interviewees had the opportunity to get themselves familiar with the subject beforehand if they wanted and by the fact that the interview took only approximately 30 minutes of their time. The first couple of interviews raised ideas for further discussion with the case organisation. Dividing the discussions with the mentor at the case organisation before the interviews and then interviewing the case organisation as the last one was an innovative idea.

4.1 Rescue department comparison

Figure 6: A comparison chart of the rescue departments, below was created to illustrate the quality of the performance of each department. The evaluation is based on the authors analysis and interpretation of the dataset collected. One way to use benchmarking is to give corresponding set of indicators to the organisations (World Health Organization 2007) and that

way compare their success and recognize gaps. All four topics in the columns are rated from zero to six and the points are given according the ratings of each activity relating to the interview questions. The indicators for each section are described below. The evaluation of the effectiveness of each section is done based on the interviews and the values for each section is described in the following paragraphs.

In the first column is preparedness and emergency response plan. This topic had three questions and the answers are rated so that the maximum value for an answer can be two points. First question asked if the department have a preparedness or continuity plan and if they do, does it cover a pandemic of this broad. To receive two points, they must have a plan which takes a pandemic into concern at this level. The second question is related to the plan and if the department was able to perform according to that plan. The third question asked if they had to adjust some workers tasks and was there a clear plan for the rearrangements. Again, two points if the plan could be utilised like that and two point if resourcing worked well.

Questions concerning the possible COVID-19-team and their management competencies are ranked in column two using the same method as in the first column. The first question in this category asked if the management decided to start a COVID-19 focused group and if this group was started did it only concentrated on leading the situation or were, they conducting tasks related to coronavirus on alongside their routine job. Two points were received if this kind of group were formed and the tasks were clear. The second and third question was about the tasks this group completed and two point were given for clear daily or weekly functions and two point from having the consistency during the whole situation.

Third column has also three questions, but this pillar is measuring the cooperation and communications between the department and the ministry, municipality and other sources sharing information of the situation. First questions concerned the adequacy and clarity of the information received from the external institutions like the Ministry of the Interior. Second questions asked if the department missed some information and the third was about the communication between the municipality. To receive two points from all questions it would have needed efficient informing and practical guidelines.

The last column, current state, shows the situation within the organisations based on two questions. The departments were asked to give themselves a grade from one to ten depending on how they feel they succeeded, and the other question was simply to produce development ideas. The score was then evenly divided by three and three for the chart.

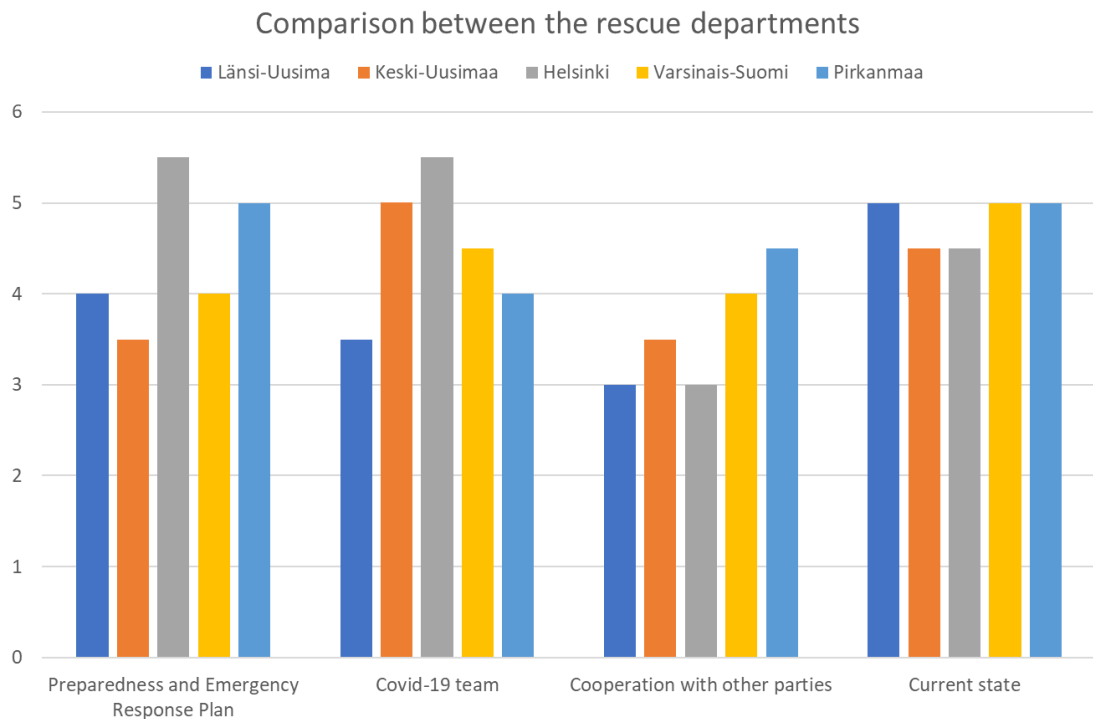


Figure 6: A comparison chart of the rescue departments.

4.1.1 Column 1: Preparedness and Emergency Response Plan

The first question, about the preparedness plan and alike, assumed every department had some sort of a plan, but it varied how much it took concern a pandemic at this level. Helsinki rescue department has scored the best ranking in the first column simply because of their preparedness and emergency response plan. Korkiamäki (2020) emphasized the importance of having clear guidelines how to start the procedure in an epidemic case. Helsinki rescue department had the plan clearly set out on how to start operations when an epidemic or pandemic might strike. The plan supplied the main framework to follow and it had clear hierarchy of command and responsibilities.

Pirkanmaa has also got high ranking therefore at in addition to their contingency plan they have a separate plan for pandemic. Their regional risk assessment includes the so-called action cards where are different scenarios and one scenario is an epidemic in Pirkanmaa region. During the spring 2020 the plans have developed and became more detailed.

The third question in this theme was about the personnel resources and if some adjustments had to be done. As the government set more restrictions and the state of emergency became on force it influenced some employees' normal tasks like the fire inspectors and safety trainer's work. Some parts of the jobs could still be done but some new tasks were assigned and for example some fire inspectors were trained to deal with communications towards

media and public. In all departments distance work was suggested to everyone who were capable of doing it.

4.1.2 Column 2: COVID-19 team

Like discussed earlier in this study the COVID-19 started to spread fast in Europe and there were only little if any information of this virus so there was no earlier experience of this kind of crises and that is why all organisations had to rely on what was suggested from the Ministry of the Interior or the municipality. The fact that latest information came in every day from various sources made it also interesting to explore how the organisations decided to act. There is some variability between the departments as with some departments had it clear who takes the lead of the situation and how the responsibilities are divided. The organisations displayed in orange and grey seemed to have unobstructed vision and responsibilities how the situation is managed.

Each department assembled a COVID-19 team or at least named the main responsibilities to handle the situation. For some departments it was clear since the beginning of March how to go ahead and who is responsible of what but in some departments the duties were not clear at the beginning. Keski-Uusimaa remodelled their organisation and formed a control unit which was divided in resource centre and intensified situation unit. Both units had liable persons leading the operations. Many departments had named persons having responsibility over some decisions which led to discussion of the importance of a deputy for every responsible person in that team as the virus could cause absence either due to contamination or quarantine.

VAHTI guidelines (2/2016) states that the contingency management is based on rules of procedures and job descriptions. The management systems and responsibilities should stay as organised and stable as possible also in a disruptive situation or in a state of emergency. This statement supports the decision of the departments to follow the normal management system and not producing new arrangements for the management. The owners of the processes and responsibility areas have the best knowledge from their areas, and they should know the importance of the processes toward the contingency of the organisation (Valtiovarainministeriö 2016). Therefore, the owners of the tasks are responsible of the contingency planning, documenting, and securing the operations and should be part of the COVID-19 team.

Whether following the normal management systems or conducting organisational change the main prior is to reassure the normal processes of rescue services. The duration of the pandemic could not be predicted, and this was the first of a kind so for that reason there are not yet established preparedness plan in case of long-lasting pandemic. The interviews proved that both ways worked well, and the quality of the services did not suffer.

4.1.3 Column 3: Cooperation with other parties

From the third column can be seen that there was some discrepancy on the information received from various places but like Korkiamäki (2020) mentioned that it was understandable without the earlier experience of this kind of pandemic but the lack of consistency of the recommendations caused frustration. Helsinki University Hospital (HUS) was praised for their clear and specific guidance in Helsinki and Keski-Uusimaa departments.

Likewise, every department were pleased for the cooperation with the municipalities. The fact that rescue departments work as part of the municipalities it is reasonable to decide to follow the instructions given from them and then add own refinements if needed.

Chief fire office for Länsi-Uusimaa rescue department, Ihamäki (2020), raised a critical issue considering misinformation and the problem as the employees are exposed to incorrect statements about the coronavirus and vaccines. That is a global and increasing problem and like said in European Parliaments (2020) website many people give disinformation, not because they want to cause harm to others but because they believe the false statements they read or hear.

4.1.4 Column 4: Current state

In the last section departments were asked to score their situation management from one to ten and all departments were on a same level. No one gave themselves a full ten as there is always room for improvements, but they were happy for where they are now. They added that the management was praised for how the situation was handled and how things are taken care now. Everyone had also proposals for improvements and in many departments, those were already under development. Pirkanmaa had improved their communications and clarified their guidelines considering the coronavirus after benchmarking their performance with Länsi-Uusimaa rescue department. Also, Varsinais-Suomi had developed their informing systems and aiming to enhance their remote communications.

4.2 Key findings

Rescue services can support normal functions and performance even in an unexpected and strange situation. All departments were able to produce a strategy even though they did not necessarily have a preparedness plan covering a pandemic on this level. The need for a plan which has instructions how to start the operations in a threatening situation instead of a plan telling what to do after couple months is more important. The roles and responsibilities should be divided, and process owners should have a deputy. Communication and cooperation with other authorities and parties is important.

The COVID-19 pandemic did not have that significant impact on rescue departments operations as the author expected. Even though there were no proper plan towards a pandemic, all daily functions could be fulfilled. The pandemic is estimated to have cost approximately 0,3 million Euros extra expenses for the case organisation during 2020, mostly due to personnel costs but also because of the personal protective equipment. The government compensated 66 000 Euros for it for the rescue services and the emergency medical care unit received compensation from the hospital district as they get corona cost support from the government (Ihamäki 2020).

Some departments admitted the challenge to get the employees to follow the guidelines. Mostly the reason for not following them was that it was sometimes unclear which were the latest guidelines. This highlights the importance of clear communication. The good practice can be found in couple departments who decided to follow the instructions which are tied to the distinct phases of the pandemic. Going through these guidelines with the personnel in the weekly info session and sub-officers briefing their crew before the shift alleviated the uncertainty.

The low rankings in the comparison chart for Länsi-Uusimaa can partly occur because of the author works at the case company and therefore the communication with the management can be more open and honest. This gives the author a better platform to point out the possible issues and produce improvement suggestions. In case an external researcher would have conducted the interviews, the answers might have been more refined.

4.3 How Länsi-Uusimaa rescue department succeeded overall and what could be improved

The service level agreement has a strategic objective in 2014-2018 to ensure continuity. This service level agreement has been extended till the end of year 2020. The aim was to secure the basic operations and necessary supportive tasks so that the basic operations can be carried out as well as possible in all situations. Ihamäki (2020) from Länsi-Uusimaa rescue department says that this goal was achieved. Some objectives were not met but all critical and important activities could be produced normally.

The coronavirus coordination team was formed later in the spring which could have simplified everyone's responsibilities if the team would have been set up right at the beginning of March when the virus arrived Finland. In Länsi-Uusimaa rescue department has been only few coronavirus cases and the responsible emergency medical service manager has been able to track them in early phases. Besides none of the contagions has become from work.

The organisation has also a plan how the personnel can be used to different tasks if needed. Rearrangements included finding optional tasks for fire inspectors and planning trainings to be implemented differently whether it was arranging them in small groups or outside where

distances to other people could be managed. For the employees to whom it was possible to move or work at home it was recommended. Wellbeing of the employees were taken care of by campaigning towards communication with each other by asking simple questions from colleagues like how you are doing. In addition, the gym stayed open for the staff, but it was scheduled, and the number of users limited. Like many other organisations also the case organisation started to receive emails from suspicious senders and those phishing emails were taken seriously right at the beginning and the awareness toward cyberthreats were increased.

Länsi-Uusimaa rescue department has excellent preparedness for remote work as everyone on the administrative unit has their own laptops and for example Teams meetings have been used long before the pandemic situation. One issue discussed with the rescue departments with remote work was a delay to respond to letters waiting at the workplace. There should be an agreed system with the employees how often they need to show up to the workplace to check the mail.

Utilizing the research data and the interviews a suggestion for improvements and a presentation was developed. The recommendations included topics such as increased risk of burnout, employee's frustration, resourcing, and long-lasting disaster during a pandemic. The document is meant to give a new perspective for preparedness planning, and it focuses on a prolonged epidemic. This document cannot be presented to the public but was presented formally for the Covid-team in Länsi-Uusimaa rescue department.

4.4 Recommendations for future development efforts

It has been requested by the case organisation that additional recommendations should be reported, which were discovered while writing this thesis. These are believed to be read by the case organisation; however, no agreement has been made should they be implemented. This study did not go into details about resourcing during a situation where there is a deficit and another disaster hits. It would be interesting to research how workforce would be organised and who would be utilised in case there would not be enough personnel to manage the daily operations. This kind of scenario could almost be seen during the state of emergency when the police had to plan whether they need to use retired police officers to enforce their labour force.

Another important subject to study would be the importance of clear communication in a prolonged crises situation. Working under uncertain conditions and with constantly changing guidelines has a huge impact on employees' motivation and coping at work. It would require research of efficient communication and about supervisors' needed skills to encourage and motivate the employees in an uncertain time.

5 Ethics and credibility of the study

A study should supply a useful data or product for the case organisation, and it should be conducted honestly, precisely, and respectfully following the good ethics and practicalities (Ojasalo et al. 2015, 48). It was important that the entire process of this thesis was transparent, and all participants were informed and updated of the progress and they had the opportunity to comment the content before the publication. It was important for the case organisation to be able to discover their deficits to develop their services and that is why all the information was critically analysed and documented.

Puusa and Juuri (2020) writes that credibility can be reflected on how much the colleagues and the persons who are part of the study are accepting the results and trust that it has been researched and analysed carefully. For this study, the background theory can be checked from the utilized websites and the participants have had the opportunity to read the study before its publishing. Likewise, the communication with the case organization has been active during the whole thesis process.

6 Conclusion

The aim for the thesis was to find out the state of preparedness and emergency response in Länsi-Uusimaa department for rescue services and how it could be improved if necessary. The phases of the study included collecting the literature systematically and deciding which of the information would be relevant for the study. The help for mapping the right kind of sources were received right at the beginning from the case organization and it was easy to follow the framework as there are only few institutions who supply official data.

The thesis was first meant to be completed by the end of August, but the delay supplied better a picture for the outcome as the second wave of the pandemic in Finland started during the autumn. The longer timeline gave more ground for the study. The COVID-19 pandemic offered an interesting research subject to that extent that like different countries decided to take different actions also the departments tried slightly different practices and shared their ideas and experiments with each other.

The cooperation with the mentors at the case organisation was excellent and their help was great. The partnership rescue departments were clearly interested toward the study and cooperative in terms of the interviews. This study collected the practices from the other rescue departments and improvement ideas were introduced to the case organization. The discussions with the departments showed that each of the organizations managed the situation well despite the mixed information from the decision makers and the uncertainty of the situation.

By the time of the interviews many departments had already developed their continuity and preparedness plans and changed some practicalities. The COVID-19 is just another pandemic and more will be coming and therefore the importance of a proper preparedness and emergency response plan is essential.

The SMART goals discussed in chapter 1.2 were partly met but when reviewing the process, it did not bring value for writing this thesis. The objective for this study was clear and the methods for reaching the goals were explained and they worked well. Whether the outcome is measurable can be argued but in the sense that the case company could be offered with the recommendations it can be noted that this goal was succeeded. The timetable prolonged from its original plan but it provided broader research platform.

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Appendix 1: Interview questions for the rescue departments

XX Pelastuslaitos
Nimi

päivämäärä

Haastattelu kysymyksiä:

- Onko laitoksella olemassa jatkuvuussuunnitelmaa ja kattaako se epidemian tällä laajuudella?
 - o Entä jos on suunnitelma, onko sitä pystytty käyttämään sellaisenaan vai jouduttu improvisoimaan.
 - o Onko jouduttu tekemään muutoksia henkilöstön työtehtäviin, esim. palotarkastajat?
- Onko perustettu oma työryhmä koronan takia ja ovatko keskittyneet vain koronaan (vaikka jonkin tietyn ajanjakson) vai hoitaneet oman toimensa sivussa?
 - o Mitä päivittäisiä, viikoittaisia tehtäviä tämä ryhmä toteuttaa?
 - o Onko ollut samat keväällä ja syksyllä?
- Miten päävastuulliset/ korona työryhmä koki ohjeiden ja toimien riittävyyden/ selkeyden?
- Mitä olisi kaivattu lisää?
- Tuliko kunnalta ohjausta tilanteen hoitamisesta ja millaiseksi koitte sen (selkeä, ristiriitainen)?
- Millaisen arvosanan (1-10) antaisitte laitoksellenne toiminnasta koronan hoitamisen osalta?
 - o Tuleeko teille mieleen kehityskohtia?