



The Competence Barrier: How C-Class Driving License Requirements Impact Operational Readiness in Finnish Contract Fire Brigades

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Executive Summary

The purpose of this project was to collect data on the extent to which structural and financial aspects related to obtaining a Category C driver's license affect barriers to participation in volunteer fire brigades. Additionally, the aim was to assess whether the issue is significant and structural in nature, and whether different policy approaches and funding decisions could be adjusted to address the problem.

Research question: How do the financial and structural constraints of obtaining a Category C driving license impact the sustainability and operational readiness of volunteer fire brigades in Finland, and what policy mechanisms can mitigate these barriers?

Design/methodology/approach: The project starts with a literature review that provides information about the C-license barrier, also some history and then proceeds to a survey-based study on difficulties regarding C-driving licenses with responses from 112 different brigades in Finland. It also includes personal interviews with the Estonian Rescue Service Agency and the Swedish fire protection system to get an overview of how the policy-aspects and issues regarding C-driving licenses looks in our neighboring countries.

Findings: The findings of this assignment are that the issue of C-driver licensing in Finland in voluntary brigades is a marginal rather than a major concern, but there have still been delays and an inability to respond due to not having a C-driving license. In Estonia, they face the same problems, but Sweden doesn't have voluntary fire-brigades, due to economical and historical aspects.

Research limitations/implications: Even though many brigades are participating, the study might lead to geographical imbalance. The data is also self-reported, which may lead to data that is biased because respondents may misremember or present themselves in a socially desirable way. The study might also have difficulty isolating variables, and the problem might have many other factors.

Originality/value: The originality of this report lies in the fact that this is the only research available regarding this issue in voluntary fire brigades in Finland and there are very few studies about this subject in the whole of the world.

Keywords: contract brigades, licensing costs, competence barrier, operational readiness, urban delays

1. Introduction

Contract fire brigades carry out rescue missions across about 90% of Finland's surface area, and about 46% of the Finnish population lives in this area. They play a very important role in the rescue services system because they participate in firefighting, rescue missions, and tasks related to preventing accidents (Pelastustoimi, n.d.). Joining and volunteering in a fire brigade requires regular training, completing courses and commitment.

In many parts of the country, contract fire brigades are the main or only available emergency response unit. They take part in firefighting, rescue operations, and other emergency situations in the same way as professional fire services. According to the National Audit Office of Finland, these fire brigades play a significant role in maintaining emergency services across the country (National Audit Office of Finland, n.d.).

In addition, there are hundreds of such fire brigades in Finland, and they make up a large proportion of emergency service personnel, according to the Finnish Association of Contract Fire Brigades (Suomen Sopimuspalokuntien Liitto) (Suomen Sopimuspalokuntien Liitto, n.d.).

In the Finnish system, and in other countries in the European Union, operating heavy vehicles requires a category C driving licence. When it comes to fire and rescue services, different types of vehicles are used for different tasks. Some smaller support vehicles may fall within the weight limit of a category B driving licence (3,500 kg). According to the European driving licence classification system, category B licences allow drivers to operate vehicles up to 3,500 kilograms, while heavier vehicles require higher licence categories such as category C (European Commission, 2024).

Many fire engines used in firefighting and rescue operations are heavier; standard fire engines may weigh between 9,000–18,000 kilos, which places them well above the 3,500 kg limit (International Fire & Safety Journal, 2023). As a result, these vehicles generally require a category C driving licence.

To obtain a category C driving licence, drivers must first hold a valid category B driving licence. Drivers must also apply for a driving licence permit and meet the requirements. These requirements include meeting health standards for driving, not having a driving ban, and fulfilling other conditions for obtaining a driving licence. The minimum age for obtaining a category C driving licence is 21 years in Finland, but a lower age may be allowed in certain cases where the driver has completed professional driver training (Traficom, 2025).

Getting a category C licence also requires completing driver training and passing both a theory test and a practical driving test (Traficom, 2025). The theory test covers basic knowledge of traffic rules,

driving the vehicle and road safety, while the practical test evaluates the driver's ability to handle a heavy vehicle safely in real traffic situations (Traficom, 2025).

2. Literature Review

2.1. The Evolution of Participation Barriers (2017–2026)

To grasp the severity of today's barriers of the Category C driving license, the historical trajectory of volunteers wearing away and in doing so affecting systems capacity, needs to be thoroughly analyzed. Through comparison of our 2026 empirical findings and the Sopimuspalokuntabarometri 2017 (Contract Fire Brigade Barometer) conducted by the Finnish Association of Contract Fire Brigades (SSPL), we built a “funnel” showcasing the many underlying factors currently affecting SSPL operations and succeeded at revealing a clear longitudinal shift. This comparison manages to illustrate how basic “everyday life” constraints have been gradually overshadowed and made worse because of escalating statutory competence requirements.

2.1.1. Demographic Stagnation and the Aging Volunteer Pool (SSPL 2017)

2017 Barometer, which surveyed 1,531 volunteer firefighters across Finland was successful at revealing structural vulnerabilities (within the system's demographic makeup) in their early phases. A decade ago, the median birth year of an active volunteer was 1977, meaning the average firefighter was already 40 years old (Suomen Sopimuspalokuntien Liitto [SSPL], 2017, p. 4). And according to SSPL 2017 research, nearly half of all active personnel (47.6%) had been involved in firefighting operations for over 20 years. (SSPL, 2017, p. 4).

What laid the groundwork for the current modern competence crisis is exactly the heavy reliance on highly tenured but aging cohort. According to our current findings, brigades are largely surviving on shoulders of older members who obtained their Category C licenses under previous, less expensive legislative frameworks. The demographic data of 2017 proves that the current “grandfathered” cohort has performed as an operational backbone of the system for over a decade and more (SSPL, 2017, p. 4). As a result, because these veteran volunteers are aging out of the active turnout duty in a combination with the lack of younger replacements equipped with Category C licenses, operational readiness is facing not a static but more of an escalating and serious threat.

2.1.2. The Pre-existing "Everyday Life Puzzle" and Attrition Risks

Volunteer retention was a fragile part of the system well before the financial and administrative burdens of the Category C license became the primary bottleneck. In 2017, 26.1% of all respondents reported that they had in fact considered quitting volunteer firefighting within the past year (SSPL, 2017, p. 15).

The prevalence of the every days personal logistical struggles was acknowledged when examining the push factors driving the grind down of volunteers. Among those who considered resignation in 2017, the absolute leading cause (42.5%) was the inability to successfully balance brigade duties with the demands of their personal and professional lives (SSPL, 2017, p. 15). In addition, the interpersonal conflicts or cliques (35.2%) and bureaucratic friction with regional rescue departments (30.9%) were cited as massive barriers to continued participation (SSPL, 2017, p. 15).

Data from 2017 sheds light on the fact that volunteer resilience was already compromised by time constraints and administrative fatigue long before the heavy vehicle licensing costs peaked. Introducing a financial barrier that can peak at 3000 euro on top of already existing structural fatigue is a valid explanation in why the Category C license requirement has become a tipping point for operational deployability.

2.1.3. Forecasting the Competence Crisis: 2017 Predictions vs. 2026 Realities

One of the most valuable insights from the 2017 Barometer is how volunteers managed to predict the current crisis with outmost accuracy. When respondents were asked about the future of their brigades, only 28.7% believed there would be enough alarm-ready members in the future, all while 38.5% explicitly stated there would not be enough personnel and 32.9% remained uncertain (SSPL, 2017, p.40).

This outlook to numerous emerging macro-trends such as severe competition from other hobbies, urbanization (in other words rural-to-urban migration), the accelerating pace in modern life and most importantly the increasing strictness of requirements and the expanding professionalization of the sector; all were attributed by volunteers in 2017 Barometer.

The specific issue of Category C licenses had not yet paralyzed the system in 2017. During that time 45.0% of respondents estimated that their brigade had enough members who carried Category C

driver's license; 34.5% felt it was almost sufficient, and only 16.7% answered having too few (SSPL, 2017, p. 44).

Today, based on our data we can argue that financial cost of statutory competence is seriously affecting turnout times, proving that the structural risk that was already identified nine years ago has transitioned from a latent threat into an active operational bottleneck. The qualitative warnings from 2017 Barometer regarding tightening demands have quite literally materialized in our 2026 findings. (SSPL, 2017, p. 40).

2.2. General Barriers, Motivations, and the Cost of Volunteering

Volunteer firefighting is a matter of the delicate balance of the selfless reasons for volunteering and personal costs that come with it. According to the SSPL Barometer from 2017, social factors have the role of a very dominant motivator in volunteering. The strongest motivators were defined to be the good team spirit and the community (69.2%), the internal drive to help others (69.0%), and the operational appeal of responding to alarms (44.0%) (SSPL, 2017, p. 10). The 2017 Barometer's results are consistent with the classic Volunteer Process Model established by Omoto and Snyder (1995) which classifies volunteer motivations into a "motivations pillar" as evaluated by Dávila (2009). In a balanced system, the selfless values and the personal reward of learning new skills provide balance for the physical and non-physical costs of volunteering (Dávila, 2009).

Malinen and Mankkinen (2018) found that financial limitations were rather low among Finnish firefighters. However, in the context of the volunteer sector, Magrone et al. (2024) applied the Job Demands-Resources (JD-R) theory, where the increase in financial needs and needs in training is considered serious "job demands". Before a volunteer even starts to drive, the high costs represent a major job demand that causes burnout symptoms, especially cynicism (Magrone et al., 2024). If a volunteer must pay a high price to participate, the selfless motivation gets nullified, leading to a severe drop in the likelihood of long-term involvement (Wilson, 2012).

2.3. The Everyday Life Puzzle and Geographic Constraints

What dictates the operational availability of contract and volunteer firefighters is not just a lack of motivation but the practical and logistical constraints. In 2023, Lantz et al. through exploring the experiences of non-career firefighters in Nordic countries gave a name to the primary struggle of complex balancing of navigating between brigade duties, employer flexibility, and family

responsibilities. They called it an “everyday life puzzle”. Historical data from SSPL Barometer (2017, p.15) supports the severity of this puzzle as 42,5% of volunteer firefighters considered resignation, naming the reason for this to be the inability to balance conflicting life demands.

Geographic realities make personal time constraints severely bigger. Grip and Karlsson (2024) determined that regarding the significant push factors causing volunteer firefighters to resign, geography coupled with lack of local workspace flexibility and strict response-time demands play a significant part in the decision making.

As analyzed by Kozjek et al (2025) Volunteer firefighting is not just a “community hobby” it is practically pushed by modern volunteer firefighting immense expertise requirements, continuous training, and a significant time commitment, into a second unpaid professional job. The outcome is that especially in rural areas where urbanization draws younger generations to larger cities the “everyday life puzzle” intensifies and by doing so leaves rural brigades with recruitments pools that get continuously smaller leaving fewer members to share the heavy burden of operational readiness (Malinen, Algera, & Mankkinen, 2020).

2.4. Competence Barrier as Systemic Risk

Individual training hurdles become a systemic operational risk when affected by requirements for specific statutory qualifications. Regarding maintenance of emergency services across Finland contract fire brigades play a vital role. (National Audit Office of Finland, n.d.). Contract fire brigades operate under strict statutory competence requirements mandated by the Emergency Services Academy Finland (n.d.), which means that specialized competence is not an optional bonus. According to the Finnish Transport and Communications Agency, driving any vehicle with a total mass exceeding 3,500 kilograms strictly requires a Category C driving license (Traficom, 2025). Because standard fire engines typically weigh between 9,000 and 18,000 kilograms, the Category C license acts as an unnegotiable requirement when considering driving heavy fire engines (International Fire & Safety Journal, 2023).

To obtain a category C license a candidate must not only carry a heavy financial burden usually ranging between 1500eur and 3000eur but also sacrifice significant time for examinations. (Autokoulu.fi, 2024). When put together, these high-cost barriers create severe human resource strain, which acts as a direct threat to the organizational survival of rural volunteer emergency services (Miller, 2015). When facing such demanding and consuming entry requirements, retention and recruitment, especially in rural areas, become an even bigger issue. (Yoon et al., 2014). According to McLennan et al. (2009) because of the absence of broader state government policy initiatives, local fire brigades have a minimal capacity in handling heavy volunteer workloads and personal costs. The

prevention of critical response bottlenecks theoretically requires systemic state-level interventions, and this is demonstrated by proof of failure when relying on local brigades' budgets to fund expensive licenses. (McLennan et al., 2009).

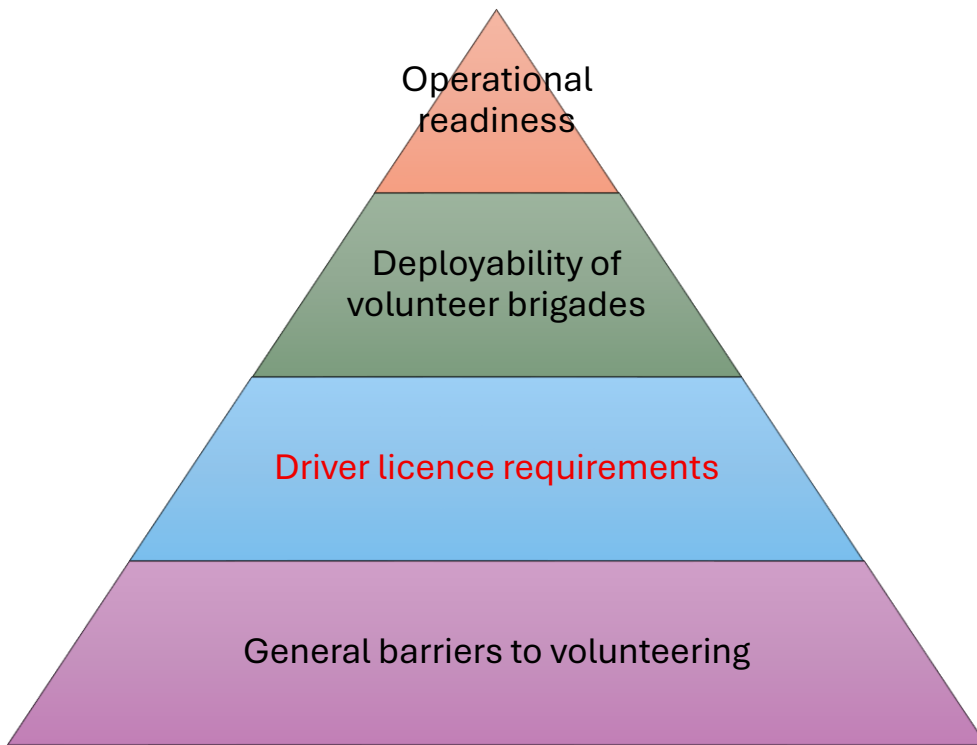
2.5. Measuring Operational Readiness and Turnout Delays

The ultimate consequence of the competence barrier must be measured through its direct impact on response capability. The Finnish Ministry of the Interior (2025) states that rescue operations must be planned so that units can respond to accidents without delay. For this to be successful it is imperative to examine the different components of an emergency response. The Home Office (2025) breaks total response time down into three distinct operational phases: call handling time, crew turnout time (the duration from the station alarm sounding to the first vehicle leaving the bay), and drive time.

An inadequate amount of C-class licensed drivers creates a critical failure in crew's turnout time due to the fact that firetruck cannot legally leave the station without a qualified driver behind its wheel. Svensson et al. (2024) examined response times in rural areas and made it clear that delays in dispatch and turnout directly threaten community survival rates. This highlights the importance of response chains of immediate local availability. The severity of this issue is recognized in the Finnish sector, as demonstrated by the Uusimaa "lähtövarmuus" (departure reliability) project, which linked brigade readiness to heavy vehicle driver availability and funded B-to-C license upgrades to tackle turnout failures (Uudenmaan Pelastusliitto, 2024).

2.6. Conceptual Model

A conceptual model was derived to visualise the synthesis of existing literature and to explain the study's logic. To illustrate the stages that ultimately affect the effectiveness of the emergency response the pyramid structure was chosen as the most logical framework.



Model 1: Conceptual model of volunteer fire brigade capacity

Representing the Tier 1. is the foundation of the model. It consists of the following general barriers to volunteering; time limits, work life balance conflicts, fluctuating motivation and the logistical “everyday life puzzle”. These are the factors that encompass the foundational everyday constraints in the lives of potential volunteers they encounter when attempting to participate.

Following this base, the Tier 2. outlines specific driver license requirements. It captures the administrative, training and financial policies that are necessary to obtain a Category C license. These requirements act as a competence barrier.

The underlying constrains of Tier 1. and Tier 2. dictate the Tier 3. The deployability of volunteer brigades, defined as the extent to which formally affiliated volunteers are legally and practically able to participate in an operational response when an incident occurs.

Finally, the Tier 4., the peak of the pyramid. It represents the ultimate operational readiness of the network, signifying its capacity to effectively respond to emergencies without turnout delays.

3. Methodology

3.1. Research design

In the study utilizes the exploratory mixed method research design to identify the role of driver's license requirements as possible constraint to the operations of the Finnish volunteer fire fighter brigades. An exploratory sequential mixed methods research design was employed, in which qualitative findings were followed by quantitative analysis. This design is characterized by a two-phase approach and is particularly suitable for developing new instruments, protocols, or taxonomies (Creswell & Plano Clark, 2011). This study's initial phase has been devoted to determining the fundamental framework of the function of driver's licenses, comprehending the current situation, and defining the main factors that should be considered. This initial phase consisted of quantitative interviews with active volunteer firefighting experts in Estonia and Sweden. This strategic decision to build our research around the principle of an exploratory sequential design allowed us to gather a critical overview of the issue in neighboring EU states and understand it on a macro level. Following this analysis, we then developed a more in-depth survey, which was distributed across 706 firefighting brigades through the commissioner organization, SSPL (Suomen Sopimuspalokuntien Liitto ry). Such a survey would provide the most critical aspect for this study: geographical spread across Finland, allowing us to measure not only the situation in a specific part of Finland, but also to collect data from volunteer firefighter brigades across the country.

3.2. Primary Data: Finland

In this study there has been deployed a cross-sectional survey design using structured questionnaire. Questionnaire has been distributed across 706 volunteer fire brigades across Finland. Commissioner of the study SPL has been supporting with distribution of the prepared survey to the brigades.

Questionnaire follows of structured survey design which consists of closed-end questions and multiple-choice questions. This approach ensures output data to be comparable and enables quantitative results to be obtained.

Unit of analysis of the survey is brigade level allowing the assessment of the situation of the driving licence limitation and related constraints. Key variables include quantity of driving licenses per brigade.

Key strength of the survey is the approach to geographical coverage. The broad distribution network of the Finnish National Association of Contract Fire Brigades enables the collection of data both from rural and urban parts of the country. This separation is especially important due to the differences in financing and response conditions in emergency brigade services. Key factors of difference between rural and urban areas include population density, travel distances, and reliance on volunteer personnel. However, despite the strength of the geographical coverage, a certain selection bias should still be taken into consideration, as the survey is distributed on a non-obligatory basis, and brigades experiencing more operational breakdowns due to issues with C-driving licenses may be more likely to respond (Andrade, 2020). Additionally, even though the geographical coverage of the survey distribution is wide, the response rate may still lead to geographical imbalances. In the survey design, it has been translated into three languages, functioning as a triangulation approach (Finnish, Swedish, and English) to improve the potential response rate by simplifying survey interpretation.

3.3. Secondary/Comparative Data

Comparative data for this study has been collected from expert interviews from Sweden and Estonia to complement the survey to be distributed across Finland.

These interviews follow the exploratory research design plan to capture operational practices on a system level and strengthen the depth of the survey with the help of qualitative data from interviews.

The Swedish expert interview case is illustrated as an example of an alternative system where volunteer brigades play a smaller role, and the system heavily depends on paid contract firefighter brigades. In short, the interview identifies that the Category C driving licence is not a constraint in the Swedish emergency service, as licences are financed at the institutional level.

On the other hand, the Estonian case shows a relatively comparable system with dependence on volunteer brigade services, particularly in rural areas. While there has been an identified shortage of C driving licences, it has not yet become a major barrier, as training is supported institutionally and organised by the Estonian Rescue Services Agency. They expect more training to be organised for volunteers. Additionally, in the interview, the expert was asked general questions regarding retention of volunteers and key barriers.

Overall, insights from the interviews provide comparative data for the exploratory research design. The findings support the preparation of a more detailed survey, focusing on the financing model of driving licences in Finland for different brigades and the frequency of delays due to a lack of licensing.

4. Findings

The central findings from the exploratory survey examining the impact of C-license barriers on firefighting operations in Finland will be presented in the following sections. The data explores operational challenges such as delays, barriers to obtaining and maintaining C-class licenses, the development of C-license availability in brigades, and comparisons between urban and rural fire brigades. These insights underscore the need for targeted measures, both financial and structural, to ensure access to licensed personnel across all brigades.

4.1. Quantitative Survey Findings

The results from question 7 (figure 1) show that 77 respondents reported no impact on emergency response due to a lack of licensed drivers, while 37 respondents have experienced delays or were unable to respond because of C-license unavailability. Out of these 37 respondents, the majority (28) reported only minor or moderate delays. Only 9 respondents reported significant delays, either being delayed by more than 15 minutes or failing to respond.

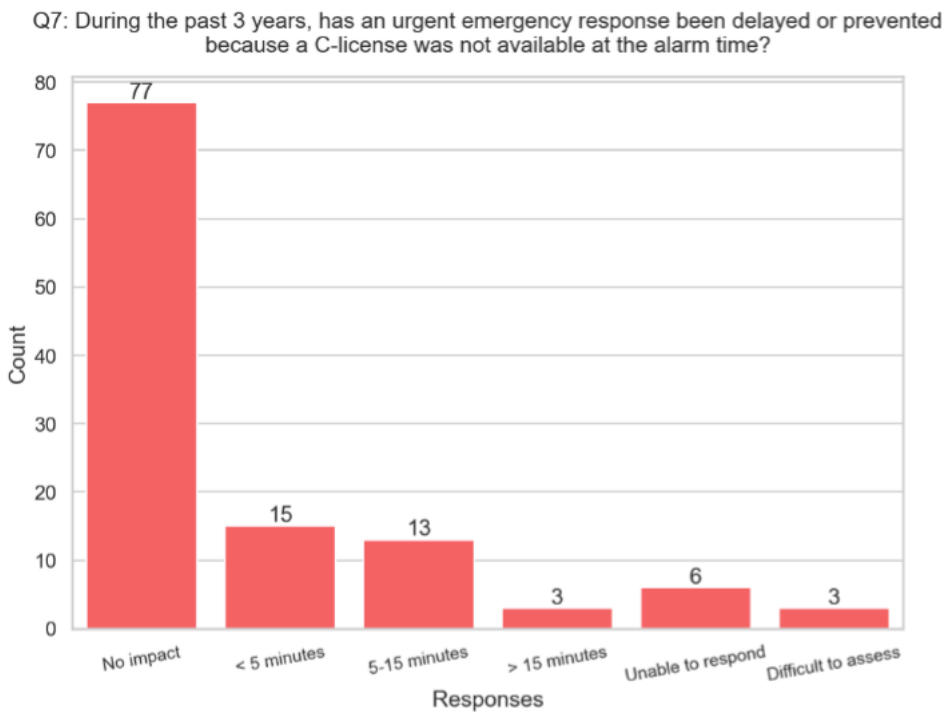


Figure 2. The results from question No. 7

Figure 2 compares how fire brigades from urban or rural areas responded to question 7. In this study, a fire brigade was considered rural if the population of the municipality it operates in is under 30 000. These findings illustrate that close to the same number of respondents from urban and rural fire brigades reported no impact in delays. However, fire brigades from urban areas reported significantly more delays in emergency responses due to lack of C-license availability.

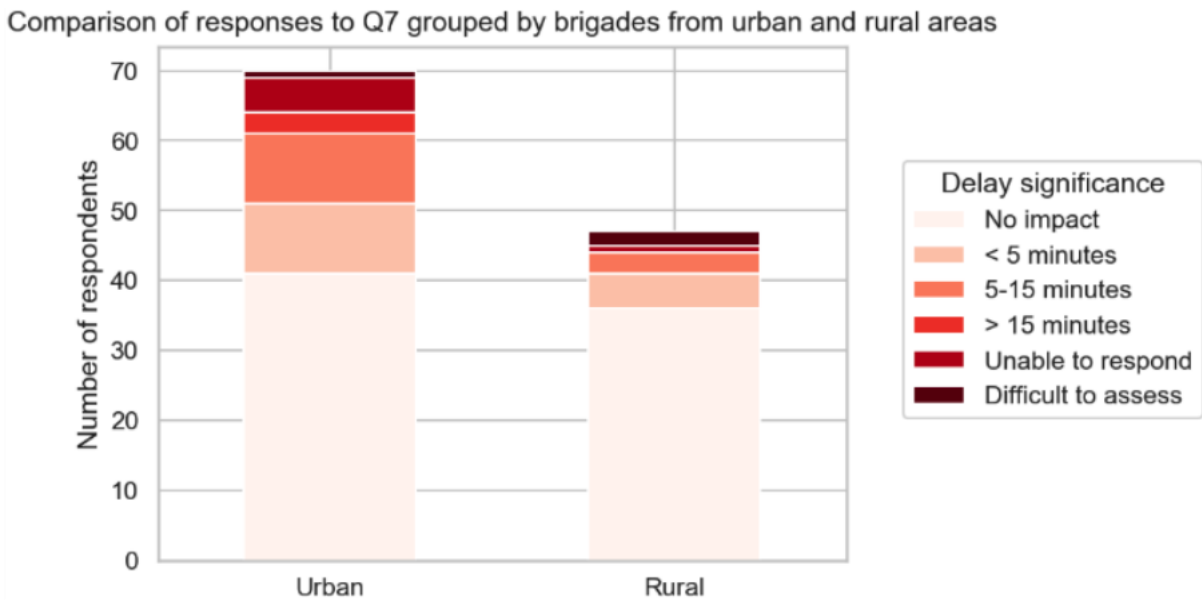


Figure 2. The results from question No. 7 grouped by urban and rural brigades

Figure 3 visualizes the responses to question 8, where 41 respondents reported delays occurring 1-2 times in the past three years, while 9 respondents reported delays 3-10 times. Although 77 respondents reported “No impact” in question 7 (figure 1), only 63 respondents reported never experiencing delays related to lack of C-license availability at alarm time, creating a significant inconsistency between responses.

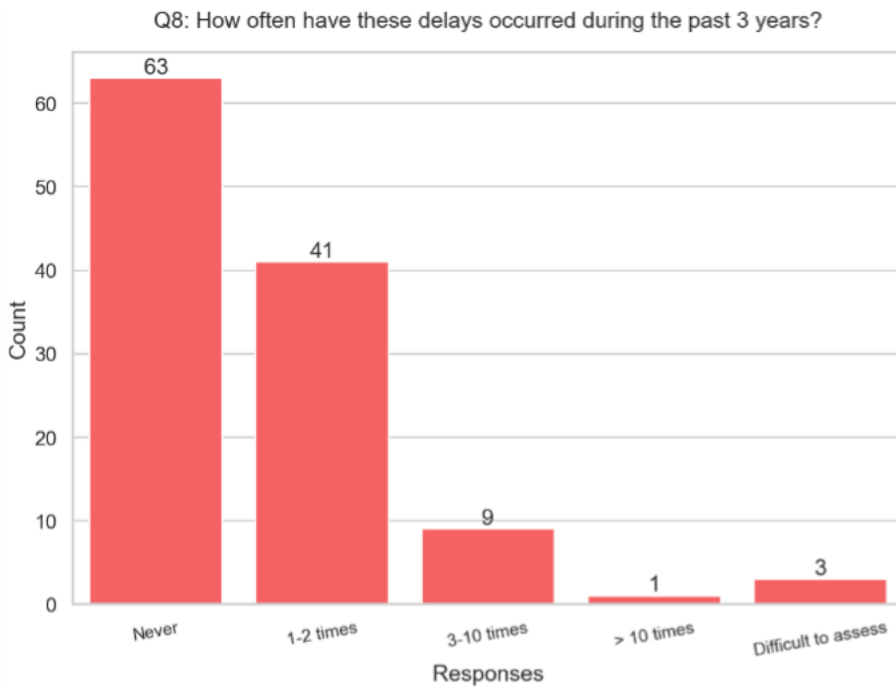


Figure 3. The results from question No. 8

In a similar manner to figure 2, figure 4 compares responses to question 8 between urban and rural fire brigades. The findings from this comparison in figure 4 align with those of figure 2, as fire brigades from urban areas indicate significantly more delays across all categories due to lack of C-license availability than fire brigades from rural areas.

Comparison of responses to Q8 grouped by brigades from urban and rural areas

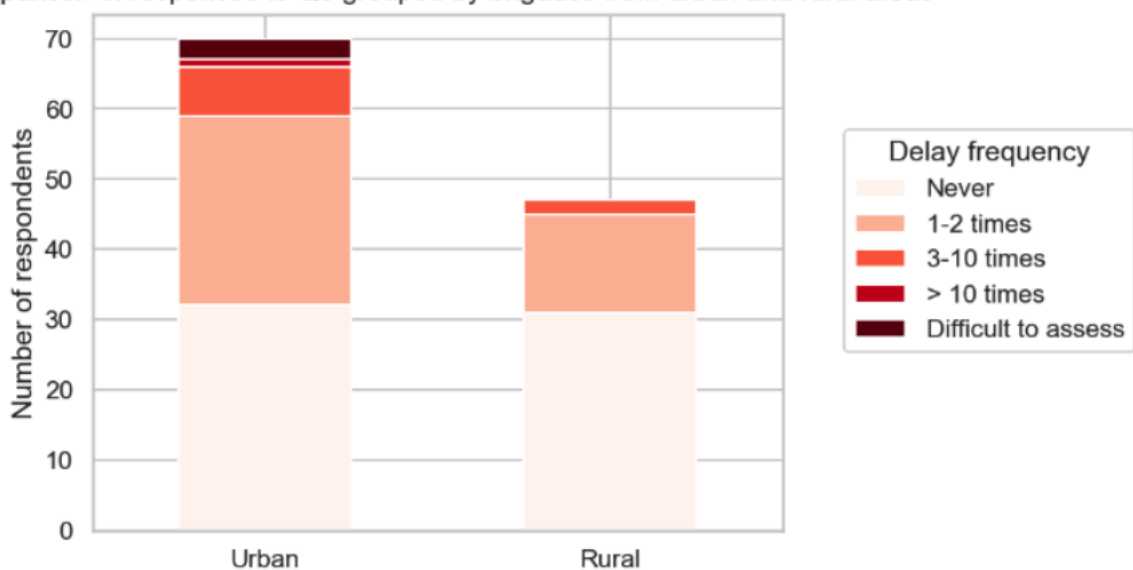
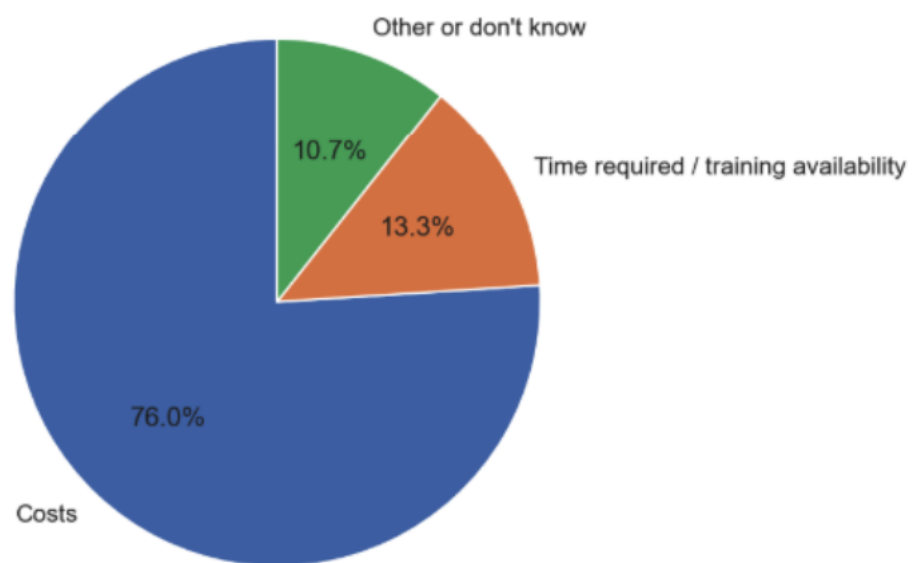


Figure 4. The results from question No. 8 grouped by urban and rural brigades

Figure 5 illustrates the main barriers to obtaining the C-license according to the respondents who felt that C-license availability is a limiting factor in emergency response. An overwhelming majority reported “Costs” to be the main barrier. A small share of respondents reported that the time required for training along with training availability was the main barrier, while other answers made up the last 10.7%.

Q11: If C-license availability is a limiting factor, what is the main barrier to obtaining the license?



(Answers below 1% have been filtered away for visual clarity)

Figure 5. The results from question No. 11

In figure 6, respondents were asked to choose which support models exist within their fire brigade for obtaining or maintaining C-licenses. 45 respondents reported that no support model exists, and 39 respondents answered that the individual covers the costs. 55 respondents (30+25) reported that either the fire brigade covers the costs, or the welfare region or municipality pays for or subsidizes the C-licenses. Question 12 allowed respondents to choose up to three different answers.

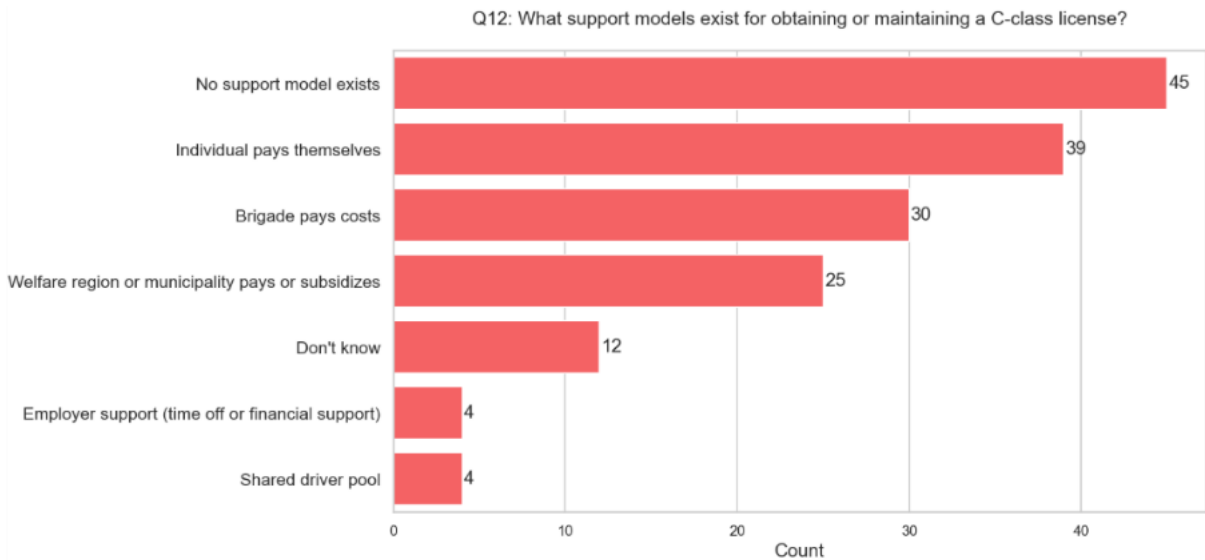


Figure 6. The results from question No. 12

Respondents were also asked to assess the development of C-license availability in their fire brigade in recent years. The results are displayed in figure 7, where about half of the respondents reported the development to have remained the same. 30 respondents felt that the availability has improved, while 20 respondents reported that the availability has worsened.

Q14: How would you assess the development of C-license availability in your brigade in recent years?

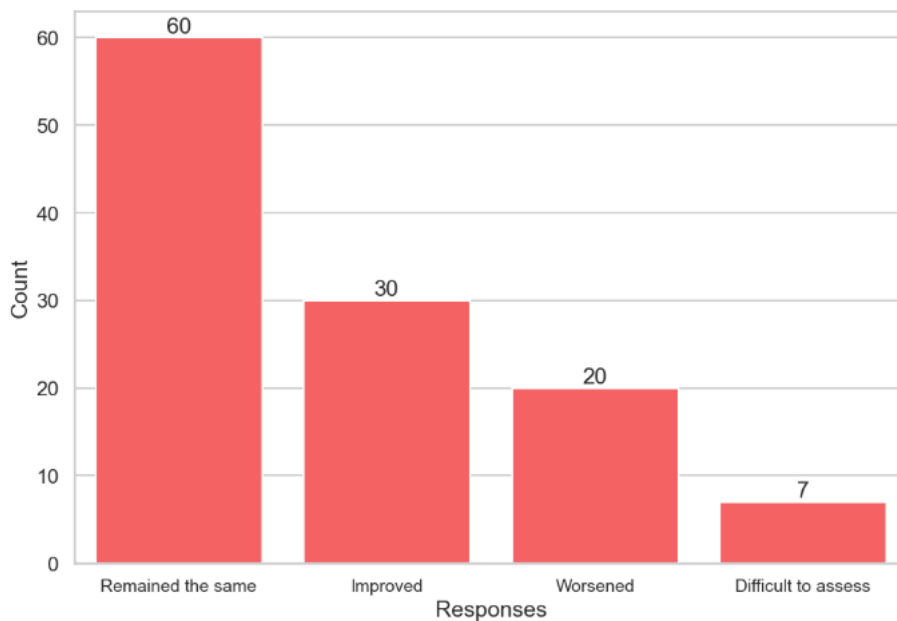


Figure 7. The results from question No. 14

In question 15, respondents were asked to evaluate if the tightening of C-license requirements has negatively affected the fire brigade's operational capacity. The response spread is visualized in figure 8, where most respondents neither disagreed nor agreed. However, significantly more respondents disagreed with the statement than those who agreed. The contrast is especially clear in both extremes, as 30 respondents strongly disagreed, while only 4 respondents strongly agreed with the statement.

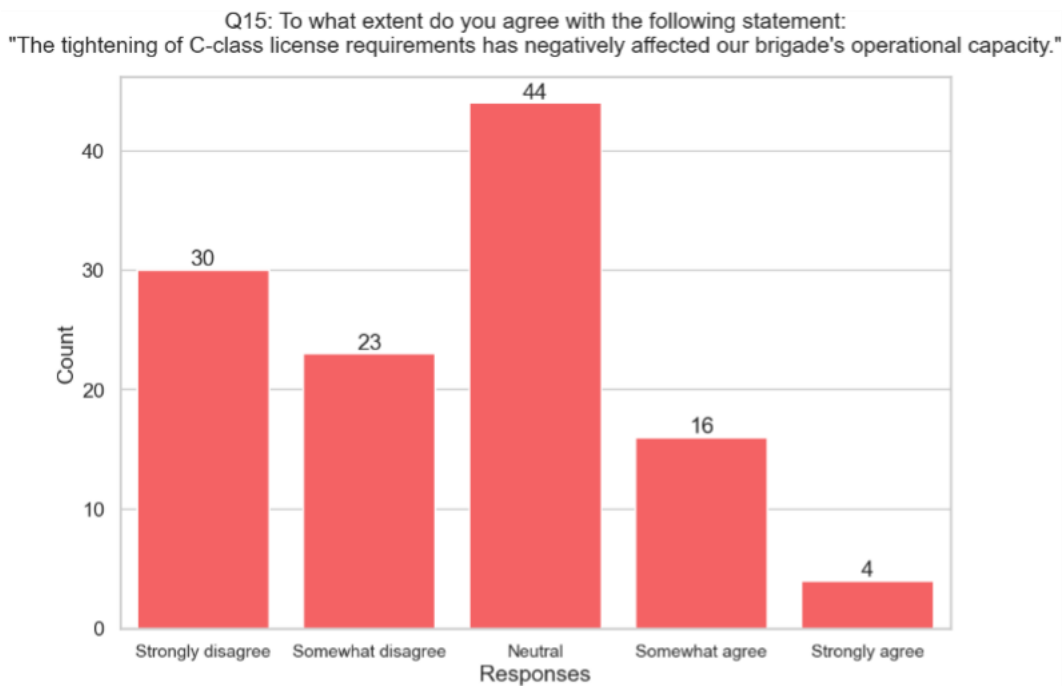
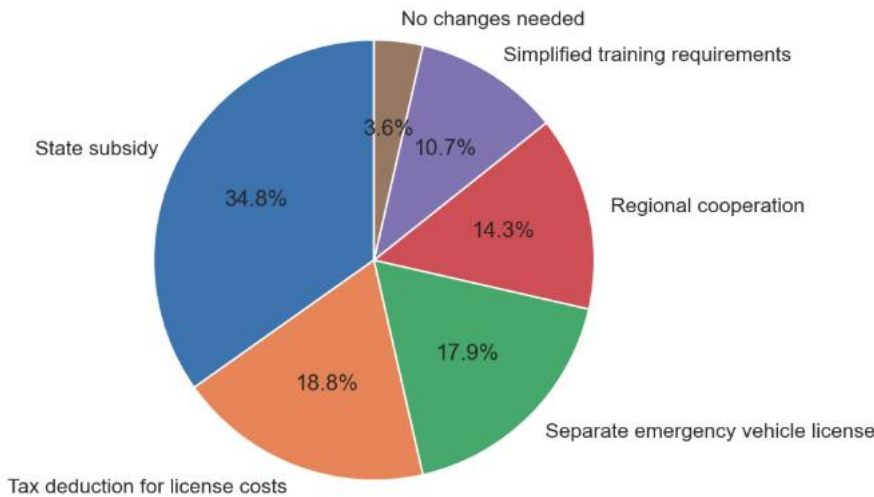


Figure 8. The results from question No. 15

Figure 9 highlights the measures that would most effectively improve the availability of C-class licenses in emergency operations. Most respondents felt that the solution is financial, as 34.8% recommended a state subsidy, and 18.8% wanted a tax deduction for C-license costs. Other popular measures were a separate emergency vehicle license (17.9%), regional cooperation between fire brigades (14.3%), and simplified training requirements (10.7%). Despite many respondents seeming content with the situation (figures 7 & 8), only 3.6% of respondents reported that no changes were needed to the current system.

Q16: Which of the following measures would most effectively improve the situation?



(Answers below 1% have been filtered away for visual clarity)

Figure 9. The results from question No. 16

4.2. Qualitative Survey Findings

At the end of the survey, respondents were asked to voluntarily highlight challenges, good practices, or support models related to the C-license barrier. The survey received 38 responses to this voluntary question, which were then coded through thematic clustering to identify recurring themes and topics from the responses. The result of the thematic clustering identified three main themes: funding as an enabler or constraint (21 responses), structural and regulatory barriers (12 responses), and future sustainability or workforce risk (9 responses).

Most responses highlighted funding, either describing funding as an enabler to solve the challenges related to obtaining and maintaining C-class licenses, or as a constraint. Funding and cost-sharing arrangements were thus found to be the central factor shaping the outcomes. Where the financial support structures exist, impacts are reported to be positive. On the other hand, where financial support is absent or insufficient, it becomes a barrier. Many of the suggestions explicitly highlight funding mechanisms, stating that sustainability and willingness to participate in operations rely on adequate funding.

Another recurring theme from the thematic clustering was structural and regulatory barriers, which addresses licensing rules, eligibility criteria and policy design. These system-level constraints were often found to be intertwined with cost and limiting recruitment of firefighters or access to C-class licenses regardless of motivation. Respondents reported that the structural and regulatory barriers impact participation in rescue operations more strongly than individual motivation.

A significant part of the responses also expressed concern for the future and long-term sustainability of operations, particularly highlighting aging personnel and lack of existing replacement pipelines. Respondents reported that even though the current situation is acceptable, the future is looking uncertain, as the current functionality does not guarantee operational sustainability in the long-term. A specific response pointed out that while the situation within their fire brigade is currently adequate, the C-license holders are beginning to age, and the prevalence of young C-license holders is lower than ever. The respondent therefore pointed out that the situation is looking bleak in the coming 10-15 years, and the survey should have asked for the age of the C-class license holders.

4.3. Comparison with Sweden and Estonia

This assignment includes interviews with two people inside the fire-brigade system in our neighboring countries, one from the Estonian Rescue Service Agency and one from the Swedish Eskilstuna Fire and Rescue Service.

4.3.1. Swedish Situation

In the Swedish interview, it was stated that before 1996 it was much easier to obtain a Category C driving license in Sweden. If you already had a Category B license, you could get a Category C license by completing a few theoretical and practical exercises, but EU legislation no longer allows this. Due to historical factors such as stronger economic situation meaning people spend their spare time on other hobbies, and the fact that Sweden has not been at war for a long time has led to Sweden not having volunteer fire brigades in the same way as Finland. Instead, it has part-time firefighters. Theoretical courses for a Category C license are also included in the job. About 7 out of 10 firefighters have a C-driving license, and it is not considered a problem in Sweden based on the interview.

4.3.2. Estonian Situation

We did an interview with the Estonian Rescue Service Agency, which is a government organization under the Ministry of the Interior that develops and maintains a secure environment in Estonia that anticipates threats and promptly and professionally assists people in the event of an accident.

In the interview with the Estonian Rescue Services Agency, we concluded that the Estonian system is much like the Finnish system, in which voluntary rescue-missions are involved in rescue operations, prevention work and civil protection. A volunteer is a person who the agency has accepted as a

recognized voluntary rescuer. Across Estonia, there are 118 voluntary rescue brigades, and over 3064 voluntary rescuers, and all voluntary rescue brigades have the basic capability needed to respond to rescue incidents. The Estonian rescue system depends a lot on volunteers, especially in rural areas.

The Estonian volunteer rescue services concluded that one of the problems with the voluntary rescue services is that they have aging vehicles and not enough funds to purchase new vehicles and old vehicles do not last forever. The voluntary rescue brigades are also underfunded, and if it continues, it will become increasingly difficult for them to maintain the staffing needed to provide services.

The problem with Category C-driving licenses is that not enough people have the license, which causes delays and other issues, and that the funding for the license is not prioritized. Other issues they are experiencing is being able to recruit more volunteers and the Estonian brigade is hoping for more courses to get the rescue services alive.

5. Discussion & Policy Implications

5.1. Key Insights

In launching the discussion on the survey results, it is important to analyse both the specific issue of driver's licenses and to place the implications of this issue within the broader context of the barriers and motivations it affects. This section will combine these two objectives and provide a comprehensive explanation of the results.

First, Q12 illustrates that the issue of Category C driver's licenses is indeed a real problem, and although it remains a relatively niche issue, which, according to most respondents not affect their operational effectiveness (97 out of 120), the first signs of inability to respond promptly to emergency calls are beginning to appear. Q7 shows that 77 respondents reported no impact on emergency response due to a lack of licensed drivers, while 37 respondents experienced delays or were unable to respond because of the unavailability of C-licenses. Of these 37 respondents, the majority (28) reported only minor or moderate delays. The same applies to the frequency of incidents: 41 respondents noted delays 1–2 times over the past three years, and the marginal statistics of more than 10 delayed calls indicate the beginning of a pattern due to the aforementioned problem.

Since this is the first time such a survey has been conducted and there is no possibility of conducting an archival analysis, a clear trend cannot be established. However, it can be argued that the risk

associated with sufficient qualifications for driving emergency vehicles is gradual and slow rather than abrupt and catastrophic. This is confirmed to some extent by Q14, which shows that 60 out of 117 respondents reported no change in the number of drivers with this license category, with improvements and declines nearly offsetting each other, resulting in a net change of zero. Currently, the ranks of Finnish volunteer firefighters consist largely of people who obtained a Class C driver's license before the law was amended. However, volunteer firefighter numbers have reportedly been declining in many countries (Yoon et al., 2014; Miller, 2015).

At the same time, the aging of the volunteer firefighter pool, the lack of motivation among young people regarding volunteer activities, and the overall difficult macroeconomic situation are factors that will gradually make the consequences of the reform more pronounced. At first glance it may seem that problem will affect rural areas the most, where volunteer brigades serve as a mainstay (Malinen et al., 2019), and the constant desire of young people to move to cities will limit not only the number of qualified drivers but also the overall pool of volunteers. However, in reality, we do not see such a trend—at least not yet—as the survey showed that the difference in the prevalence of driver's license issues between rural and urban areas is not particularly significant. However, as noted earlier, the gradual nature of the problem may be a decisive factor in this outcome and could shift the trend.

Second, Q11 shows that costs account for the lion's share of the reasons why it is difficult to obtain a C license. In summary, it can be concluded that the problem lies not so much in volunteers' motivation to devote time to training, but rather in the lack of a supportive financial system. The Q12 chart elaborates on this issue in more detail: 71 out of 159 respondents reported receiving financial support from a third party, while 88 respondents are, in one way or another, burdened by financial costs. Referring to the table of barriers to volunteering among Finns that Malinen and Mankkinen (2018) presented in their study, it is worth noting that financial reasons ranked as high as 10th out of 13 in the table, significantly trailing behind barriers such as lack of time or conflict with studies/work. Changes in the law that increase the cost of obtaining certain qualifications could reverse this trend and push financial risks to the top.

5.2. Strengths and Limitations of Study

The study has certain strengths and weaknesses. Among its strengths is the high operationalization of the C-license barrier, which is tracked using several indicators (frequency, delay time, inability to respond). This facilitates a clear distinction between license-related constraints and general staffing shortages.

Limitations include factors such as self-reported responses, upon which the questionnaire is based, which carry a high risk of vague or inaccurate information. Additionally, generalizability is limited and focuses exclusively on the Finnish context; the diverse volunteer culture and its complex system, which varies from country to country, make this aspect highly unique. Furthermore, the consequences identified as a direct impact of the C-license issue, while aligning with the research objective, may be part of more complex problems related to social and psychological barriers and motivations regarding volunteer activities.

5.3. Policy Implications

The consequences of the changes implemented by the government, which have made it more expensive and difficult to obtain a Class C license, exhibit the characteristics of a latent structural risk that may evolve gradually. This is confirmed by Studer & von Schnurbein (2013), who emphasise the gradual decline in capacity due to the accumulation of barriers to participation.

The first consequence is the promotion of a competence barrier, which has a direct impact on the availability of volunteers. Wilson (2012) states in his work that availability of resources and the costs associated with engagement are one of the factors influencing participation in volunteer organisations, and the more a potential volunteer must pay for this entry, the lower the likelihood of their participation. To this, one should add the observable trade-off, which manifests itself, on the one hand, in the increased professionalisation of volunteer services and the quality of services, and on the other, limits access for its participants.

The second consequence is a reduction in the system's stability and its ability to remain resilient within the national context. The vulnerability of less densely populated regions to respond effectively to urgent challenges creates a gap characterized by a certain dependence on more populated areas, which carries many risks in the event of isolation or overburdening of the national rescue system. This is consistent with research in the field of emergency services, which shows that the availability of key competencies (particularly the ability to drive specialized vehicles) is a critical bottleneck in the response system (Wankhade & Patnaik, 2020).

The third implication points to a possible shift in barriers. The dominance of time constraints mentioned in the previous section is likely to give way to financial constraints.

To summarize the implications of the legislative changes, it is worth referring to the classic model by Omoto and Snyder (1995) in the study of Dávila, M. C. (2009) as *Figure 1*, which illustrates how various factors influence the overall duration of a volunteer's service to varying degrees. The

complexity of the process and the cost of obtaining a Category C driver’s license directly impact the Enhancement and Understanding factors. This is because personal development becomes expensive and the ROI decreases; as a result, volunteers perceive the learning reward as less accessible and not worth the time and money. A similar phenomenon occurs with values. In many cases, values (usually altruistic) can offset the costs, but not always. In this case, the costs risk becoming too high and may negate altruistic motivation. According to the model, these three factors are part of a broader “motivations pillar” that is directly related to the total duration of service.

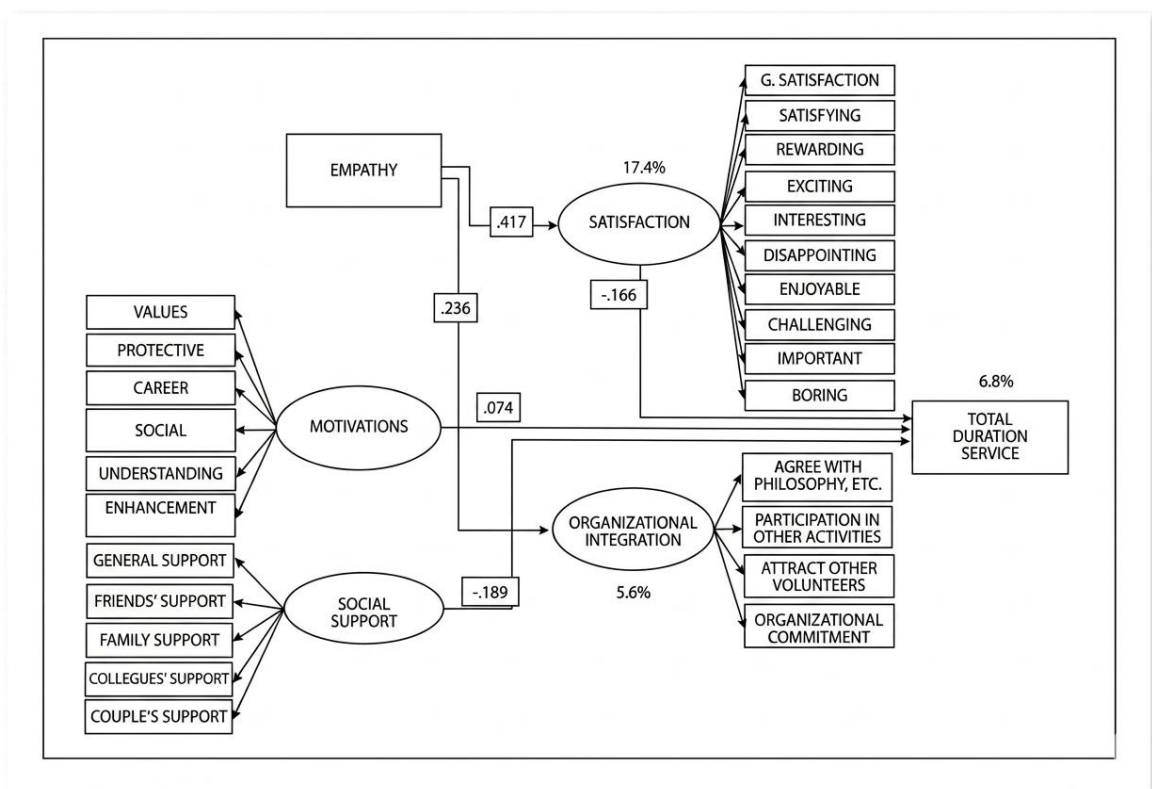


Figure 2: Omoto and Snyder’s (1995) model. Standardized regression of the most important relationships, covariances, and the percentages of explained variance.

5.4. Policy Recommendations

Moving on to the recommendations section, it is worth noting that the complexity of the issue may require recommendations across behavioural, financial, and organisational mechanisms. Despite the fact the survey results showed that the cost of obtaining a license is the main barrier, volunteers’ stinginess may go beyond mere financial considerations and be accompanied by a lack of awareness and uncertainty, which calls for recommendations in all three areas: financial (as the primary focus), behavioural, and structural.

The first recommendation concerns subsidising service providers and the use of active labour market policies. The main goal of active labour market policies (ALMPs) is to increase employment opportunities for job seekers and to improve the matching between jobs (vacancies) and workers (i.e., the unemployed). Finland is a leading country in the area of Active Labour Market Policies and spent 0.86% of GDP on ALMPs versus 0.48% for the OECD on average (European Commission, 2017). It is important to note that the proposed practice is not a direct definition of ALMP since it does not apply to the unemployed; however, this measure can be conceptualised as an ALMP-type training intervention. Moving to the substance of the recommendation, it proposes entering into contracts with accredited driving schools to provide training for obtaining a Category C driver's license at a fixed, regulated price. The advantage of the state interacting with businesses, rather than individuals, is the reduction of the bureaucratic burden on the latter. Drawing a parallel with cost reimbursement schemes, one might assume that this approach will involve longer timeframes for both the government and the individual due to its less centralized nature and the greater volume of data processing required. In the context of volunteer rescue services and emergency response, the implementation of such a mechanism allows the government to control training costs, ensure an adequate number of training slots, and reduce the financial barriers to entry that currently hinder the recruitment and retention of volunteers.

Reducing the financial burden on volunteers can also be achieved with the help of the volunteer teams themselves. Therefore, another recommendation proposes a conditional cost-sharing scheme, in which the costs of professional development are shared between the volunteer and the organisation. It is important to note that partial compensation is provided only if a specified minimum period of active service is completed. This condition is necessary to retain volunteers by linking financial compensation to the duration of service. Typically, such mechanisms for sharing the financial burden are popular in professions facing labour shortages (healthcare, transportation, and public services). Drawing on the functional approach of Omoto & Snyder (1995), one can anticipate a strengthening of career and enhancement functions, increasing the perceived return on investment in training and boosting long-term motivation to participate. In tandem with the ALMP instrument, this will significantly reduce the overall financial burden on the individual, thereby making entry costs acceptable and lower than the benefits.

The second recommendation will cover behavioural initiative. One such incentive could be a peer-based mentoring system, in which experienced drivers with a C license serve as mentors to new volunteers. It is important to note that this is an inclusive system of non-material recognition, which is crucial in the context of avoiding excessive internal hierarchies or undermining overall team cohesion. Research shows that the team atmosphere is one of the barriers to volunteer retention; therefore, the peer-based mentoring system focuses exclusively on social connections and the formation of social capital through gradual integration into practical operational tasks and training

during real-world deployments. Three advantages of this approach can be identified. First, uncertainty reduction, where the mentor provides a “roadmap” and potentially encourages the newcomer to improve their skills. Second, social proof, which is a classic mechanism for volunteering, where a sense of expectation from the team regarding the potential role emerges. Third, a reduction in “effort cost perception,” where the mentor helps lower the perceived difficulty and risk of failure. In other words, while the peer-based mentoring system alone cannot stand as the sole solution, it can serve as a gentle psychological and social nudge toward professional development, provided the financial barrier is not too high.

The third strategic recommendation aims to change the organizational structure of volunteer teams. Assuming that a volunteer is emotionally and financially ready to obtain a Class C driver’s license, there remains a risk that the volunteer may be reluctant to go through the bureaucratic steps of interacting with stakeholders: the driving school, Traficom, and Ajovarva (for example, due to a lack of time, which was also one of the factors). Here, the team can take over the administrative function, which includes communication with all stakeholders on the individual’s behalf. Given the already significant time and cognitive burden on the candidate, this approach reduces administrative burden costs, which are defined in the literature as the time, effort, and psychological resources required to comply with institutional requirements (Herd & Moynihan, 2018). Given that a lack of time is one of the leading barriers to volunteering, this lends even greater significance to this context (Malinen & Mankkinen, 2018b).

6. Conclusion

6.1. Key Conclusions

In conclusion, it is important to recognize that the issue of access to a Class C driver’s license among volunteer fire departments is, at this stage, a marginal rather than a mainstream concern. The very limited availability of academic literature restricted the scope of this study to determining the scale of the potential problem and linking it to the main motivations and barriers to volunteering across all contexts. Although the study did not reveal a catastrophic surge that would prevent or significantly limit the ability to respond promptly to calls, we anticipate a gradual increase in challenges. Specifically, 37 respondents reported instances of delays or inability to respond, most of which were minor or moderate in nature. Although such incidents are relatively rare (mostly 1–2 cases over three years), the presence of isolated instances of frequent delays (more than 10 calls) indicates the emergence of a potential systemic trend.

It is also important to note the paradoxical nature of the problem's magnitude dominating in urban areas, despite the widespread complex issues actively discussed in the existing academic literature, particularly the urbanisation of youth and a general lack of motivation for proactive volunteer work.

However, given that the main objective of the study was to identify the existence of the problem, it can be said that we have gotten this process off the ground, while also noting that the decisive factor behind the problem is the financial barrier. Only a minority receives external financial support, while the vast majority is forced to cover expenses on their own. This points to inefficiency, or rather the absence of adequate mechanisms that could neutralize problems at the initial stage. The study proposed several strategic recommendations to various stakeholders (SSPL, government) that would help alleviate the burden on volunteers; these recommendations require both the implementation of various initiatives and organizational improvements. Despite the current scale of the problem, ignoring it could result in reduced resilience and the national system's ability to ensure the territory's stability in a balanced manner.

6.2. Future Research

Given the limitations of this study and the niche nature of the issue, there are many ways to continue our work. One of them is to conduct a comparative analysis among countries with different cultures regarding volunteering. This would provide a broader perspective on the scale of the identified problem. A similar comparison could also be conducted regarding the regulatory characteristics of different countries in this area. An even more important direction is the empirical testing of the effectiveness of the proposed interventions—specifically cost-sharing, mentoring, and administrative delegation models—in real organizational settings. An experimental approach could add a dimension of validity to the recommendations made.

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Appendices

Appendix 1: Trilingual Survey

Kolmikielinen kyselytutkimus: C-ajokorttivaatimukset ja sopimuspalokuntien valmius

Trespråkig enkätundersökning: C-körkortskrav och avtalsbrandkårernas beredskap

Trilingual Survey: C-class License Requirements and Contract Fire Brigade Readiness

Johdanto ja tietosuoja / Inledning och dataskydd / Introduction & Confidentiality

Tämän kyselyn tarkoituksena on selvittää C-ajokorttien saatavuuden vaikutusta sopimuspalokuntien hälytysvalmiuteen. Kyselyyn vastaaminen vie noin 5-10 minuuttia. Vastaukset eivät ole tutkimusryhmälle anonyymejä, mutta tulokset raportoidaan vain koottuna ja palokunnat koodataan analyysivaiheessa tunnistamisen estämiseksi.

Syftet med denna enkät är att utreda hur tillgången till C-körkort påverkar avtalsbrandkårernas larmberedskap. Det tar cirka 5-10 minuter att besvara enkäten. Svaren är inte anonyma för forskargruppen, men resultaten rapporteras endast i sammanställd form och brandkårerna kodas under analysfasen för att förhindra identifiering.

The purpose of this survey is to assess how the availability of C-class driving licenses affects the emergency response readiness of contract fire brigades. It will take approximately 5-10 minutes to complete. Responses are not anonymous to the research team, but results will be reported only in aggregate, and individual brigades will be coded during the analysis phase.

Kiitos yhteistyöstä! / Tack för samarbetet! / Thank you for your cooperation!

Polina Hartikainen, Roman Klymenko, Dmitrii Niukkanen, Jesper Söderblom ja Hugo Wilenius

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Hanken School of Economics

OSA A: Taustatiedot / DEL A: Bakgrundsinformation / SECTION A: Background

1. Palokunnan nimi / Brandkårens namn / Fire brigade name

[_____]

2. Hyvinvointialue / Välfärdsområde / Welfare region

[_____]

3. Vastaajan rooli / Respondentens roll / Respondent role

[] Palokunnan päällikkö tai johto / Brandkårschef eller ledning / Brigade chief or leadership

[] Hälytysosaston päällikkö tai päivystäjä / Alarmavdelningens chef eller dejourerande / Operational lead / Duty officer

[] Koulutusvastaava / Utbildningsansvarig / Training coordinator

[] Muu / Annan / Other

4. Käyttääkö palokuntanne hälytysajoneuvoja, jotka vaativat C-luokan ajokortin? / Använder er brandkår utryckningsfordon som kräver körkort i klass C? / Does your brigade operate response vehicles that require a C-class license?

Kyllä / Ja / Yes

Ei / Nej / No

En tiedä / Vet ej / Don't know

(Jos vastaus on "Ei", siirry kysymykseen 12 / Om svaret är "Nej", gå till fråga 12 / If the answer is "No", skip to question 12)

OSA B: Kapasiteetti / DEL B: Kapacitet / SECTION B: Capacity

5. Kuinka monta hälytysvalmista sopimuspalokuntalaista yksikössänne on tällä hetkellä? / Hur många larmberedda avtalsbrandmän har ni i er enhet för tillfället? / How many response-ready contract firefighters does your brigade currently have?

[_____]

6. Kuinka monella heistä on voimassa oleva C-luokan ajokortti? / Hur många av dem har ett giltigt C-körkort? / How many of them hold a valid C-class driving license?

[_____]

OSA C: Vaikutukset ja viiveet / DEL C: Påverkan och dröjsmål / SECTION C: Impact & Delays

7. Onko viimeisen 3 vuoden aikana kiireellinen hälytystehtävälle lähtö viivästynyt tai estynyt siksi, ettei C-ajokorttia ole ollut saatavilla hälytyshetkellä? / Har en brådskande uttryckning under de senaste 3 åren fördröjts eller förhindrats på grund av att C-körkort inte funnits tillgängligt vid larmtidpunkten? / During the past 3 years, has an urgent emergency response been delayed or prevented because a C-license was not available at the alarm time?

Ei vaikutusta / Ingen påverkan / No impact

Kyllä, viivästynyt alle 5 minuuttia / Ja, fördröjts med mindre än 5 minuter / Yes, delayed by less than 5 minutes

Kyllä, viivästynyt 5-15 minuuttia / Ja, fördröjts med 5-15 minuter / Yes, delayed by 5-15 minutes

Kyllä, viivästynyt yli 15 minuuttia / Ja, fördröjts med över 15 minuter / Yes, delayed by more than 15 minutes

Kyllä, yksikkö ei kyennyt vastaamaan / Ja, enheten kunde inte rycka ut / Yes, the unit was unable to respond

Vaikea arvioida / Svårt att uppskatta / Difficult to assess

8. Kuinka usein näitä viivästyksiä on tapahtunut viimeisen 3 vuoden aikana? / Hur ofta har dessa fördröjningar uppstått under de senaste 3 åren? / How often have these delays occurred during the past 3 years?

Ei koskaan / Aldrig / Never

1-2 kertaa / 1-2 gånger / 1-2 times

3-5 kertaa / 3-5 gånger / 3-5 times 6-10 kertaa / 6-10 gånger / 6-10 times

Yli 10 kertaa / Fler än 10 gånger / More than 10 times

Vaikea arvioida / Svårt att uppskatta / Difficult to assess

9. Mihin vuorokaudenaikaan haasteet C-kortin puutteen vuoksi yleisimmin esiintyvät? (Valitse kaikki sopivat) / Vid vilken tid på dygnet uppstår utmaningar på grund av brist på C-körkort oftast? (Välj alla som passar) / At which times do

challenges related to the lack of C-class licenses most often occur? (Select all that apply)

Päiväsaikaan (työaikana) / Dagtid (arbetstid) / Daytime (working hours)

Iltaisin / Kvällstid / Evening

Öisin / Nattetid / Night

Viikonloppuisin / Helger / Weekends

Ei selvää kaavaa / Inget tydligt mönster / No clear pattern

Ei koske palokuntaamme / Gäller inte vår brandkår / Not applicable to our brigade

10. Mikä oli ensisijainen syy viivästykseseen tai vastaamatta jättämiseen? (Valitse yksi) / Vad var den främsta orsaken till fördröjningen eller uteblivet svar? (Välj ett alternativ) / What was the primary cause for the delay or non-response? (Select one)

C-kortin haltijoiden puute hälytyshetkellä / Brist på innehavare av C-körkort vid larmtidpunkten / Lack of C-class license holders available at alarm time

Yleinen vastaajien puute (kortista riippumatta) / Allmän brist på personal (oavsett körkort) / General shortage of responders (regardless of license)

Vastaajia on, mutta he eivät pääse hälytykselle (työ, matka jne.) / Det finns personal, men de kan inte delta i larmet (arbete, resa osv.) / Responders exist but are unavailable at alarm time (work, travel, etc.)

Kalusto- tai asevalmiusongelma / Problem med material- eller stationsberedskap / Vehicle, equipment, or station readiness issue

Muu tai epäselvä / Annat eller oklart / Other or unclear

OSA D: Esteet ja ratkaisumallit / DEL D: Hinder och lösningsmodeller / SECTION D: Barriers & Solutions

11. Jos C-korttien saatavuus on rajoittava tekijä, mikä on suurin este kortin hankkimiselle? (Valitse yksi) / Om tillgången till C-körkort är en begränsande faktor, vad är det största hindret för att skaffa kortet? (Välj ett alternativ) / If C-license availability is a limiting factor, what is the main barrier to obtaining the license? (Select one)

Kustannukset / Kostnader / Costs

Koulutukseen vaadittava aika tai saatavuus / Tidsåtgång för utbildning eller tillgänglighet / Time required or training availability

Työnantajan tuen puute (vapaa-aika, joustavuus) / Brist på stöd från arbetsgivaren (ledighet, flexibilitet) / Lack of employer support (time off, flexibility)

Kelpoisuusrajoitteet (ikä, terveyst) / Behörighetsbegränsningar (ålder, hälsa) / Eligibility constraints (age, health)

Motivaation puute / Brist på motivation / Lack of motivation

Muu tai en tiedä / Annat eller vet ej / Other or don't know

12. Millaisia tukimalleja C-kortin hankintaan tai ylläpitoon on käytössä? (Valitse kaikki sopivat) / Vilka typer av stödmodeller finns för anskaffning eller underhåll av C-körkort? (Välj alla som passar) / What support models exist for obtaining or maintaining a C-class license? (Select all that apply)

Palokunta maksaa kulut / Brandkåren betalar kostnaderna / Brigade pays costs

Hyvinvointialue tai kunta maksaa tai tukee / Välfärdsområdet eller kommunen betalar eller stöder / Welfare region or municipality pays or subsidizes

Työnantajan tuki (vapaa-aika tai tuki) / Arbetsgivarens stöd (ledighet eller ekonomiskt stöd) / Employer support (time off or financial support)

Henkilö maksaa itse / Personen betalar själv / Individual pays themselves

Jaettu kuljettajapooli / Delad förarpool / Shared driver pool

Tukimallia ei ole / Ingen stödmodell finns / No support model exists

En tiedä / Vet ej / Don't know

13. Miten kuljettajapula yleensä ratkaistaan tilanteen sattuessa? (Valitse yksi) / Hur löses förarbristen vanligtvis när situationen uppstår? (Välj ett alternativ) / How is a driver shortage usually resolved when it occurs? (Select one)

Kuljettaja saapuu myöhemmin / Föraren anländer senare / A driver arrives later

Naapuripalokunta tarjoaa kuljettajan tai apua / Grannbrandkåren erbjuder förare eller hjälp / Neighbouring brigade provides a driver or help

Käytetään muuta ajoneuvoa / Ett annat fordon används / A different vehicle is deployed

Tehtävän vasteen lasku tai merkittävä viive / Sänkt responsnivå eller betydande fördröjning / Response is downgraded or significantly delayed

Palokunta ei kykene vastaamaan / Brandkåren kan inte rycka ut / Brigade is unable to respond

Ei koske meitä / Gäller inte oss / Not applicable

14. Arviosi C-korttien saatavuuden kehityksestä palokunnassanne viime vuosina? / Hur bedömer du utvecklingen av tillgången till C-körkort i er brandkår under de senaste åren? / How would you assess the development of C-license availability in your brigade in recent years?

Parantunut / Förbättrats / Improved

Pysynyt samana / Förblivit densamma / Remained the same

Heikentynyt / Försämrats / Worsened

Vaikea arvioida / Svårt att uppskatta / Difficult to assess

15. Miten vahvasti olette samaa mieltä seuraavasta väitteestä: "C-ajokorttivaatimusten tiukentuminen on vaikuttanut negatiivisesti palokuntamme toimintakykyyn." / Hur starkt instämmer ni i följande påstående: "Skärpningen av C-körkortskraven har påverkat vår brandkårs funktionsförmåga negativt." / To what extent do you agree with the following statement: "The tightening of C-class license requirements has negatively affected our brigade's operational capacity."

1 = Täysin eri mieltä / Helt av annan åsikt / Strongly disagree

5 = Täysin samaa mieltä / Helt av samma åsikt / Strongly agree

1 2 3 4 5

16. Mitkä seuraavista toimita parantaisivat tilannetta tehokkaisimmin? (Valitse enintään kolme) / Vilka av följande åtgärder skulle förbättra situationen mest effektivt? (Välj högst tre) / Which of the following measures would most effectively improve the situation? (Select up to three)

Valtion tuki C-korttikoulutukseen / Statligt stöd för C-körkortsutbildning / State subsidy for C-class training

Yksinkertaistetut koulutusvaatimukset / Förenklade utbildningskrav / Simplified training requirements

Erillinen hälytysajoneuvokortti / Ett separat körkort för utryckningsfordon / Separate emergency vehicle driver category

Verovähennysoikeus korttikuluista / Rätt till skatteavdrag för körkortskostnader / Tax deductions for license costs

Alueellinen yhteistyö / Regionalt samarbete / Regional cooperation

Muutoksia ei tarvita / Inga ändringar behövs / No changes needed

Muu (mikä?) / Annat (vad?) / Other (please specify): [_____]

OSA E: Vapaat kommentit / DEL E: Fria kommentarer / SECTION E: Comments

17. Vapaat kommentit ja hyvät käytännöt: (Kuvaa haasteita, hyviä käytäntöjä tai tukimalleja, joita haluat korostaa) / Fria kommentarer och god praxis: (Beskriv utmaningar, god praxis eller stödmodeller som du vill lyfta fram) / Free comments and good practices: (Describe challenges, good practices, or support models you would like to highlight)

Appendix 2: Interview Structure, Estonia

Intro

- Who we are
- Project scope
- Comparative part of the project (Finland-Estonia-Sweden)
- Confidentiality matter
- Could you briefly introduce your organisation and your role in Päästeliit?

Organisational model of Päästeliit

1. How is the Estonian volunteer firefighting system structured, and what are its main functions? (number of units, number of volunteers, hierarchy, etc.)
2. What is the role of Päästeliit in the overall national rescue service system?
3. How dependent is the national system on volunteers?
4. What are the main funding sources for volunteer rescue units in Estonia?
5. Does funding affect the recruitment and retention of volunteers? How big is this effect (mild, moderate, critical)?
6. What part (%) of the total budget goes to recruitment and retention of volunteers?

Problem identification (most important)

1. What are the top 3 biggest challenges volunteer units face today?
2. Has the number of volunteers changed in recent years (Mild, moderate or critical change)? What can be reasons behind that change in your opinion?
3. Do you see a C driver's licence training among volunteer barriers? How big is this issue in comparison with other barriers? (Mild, moderate or critical effect)
4. Have potential volunteers refused to join because of licence requirements?
5. What's harder task today, retain existing volunteers or recruiting new ones? Was it the same situation in the last 15 years?
6. How these changes affect your ability to provide rescue services in terms of reaction time, (other KPIs TBD). Have any units reduced their activity because of too few volunteers?

Adaptation to challenges context

1. How has the system adapted to volunteer shortages (if there are shortages)
2. What new recruitment or incentive strategies you implemented or want to implement to tackle the problem?
3. Any cooperation with the government, private sector, EU, or academia on this matter?

Appendix 3: Interview Structure, Sweden

- Who we are
- Project scope
- Comparative part of the project (Finland-Estonia-Sweden)
- Confidentiality matter
- Could you briefly introduce your organisation and your role in Swedish rescue services?

Organisational model of Swedish rescue services

1. How is the Swedish volunteer firefighting system structured, and what are its main functions? (number of units, number of volunteers, hierarchy, etc.)
2. What is the role of Swedish rescue services in the overall national rescue service system?
3. How dependent is the national system on volunteers?
4. What are the main funding sources for volunteer rescue units in Sweden?
5. Does funding affect the recruitment and retention of volunteers? How big is this effect (mild, moderate, critical)?
6. What part (%) of the total budget goes to recruitment and retention of volunteers?

Problem identification (most important)

1. What are the top 3 biggest challenges volunteer units face today?
2. Has the number of volunteers changed in recent years (Mild, moderate or critical change)? What are the reasons behind that change in your opinion?
3. Do you see a C driver's licence training among volunteer barriers? How big is this issue in comparison with other barriers? (Mild, moderate or critical effect)
4. Have potential volunteers refused to join because of licence requirements?

Adaptation to challenges context

1. How has the system adapted to volunteer shortages (if there are shortages)
2. What new recruitment or incentive strategies you implemented or want to implement to tackle the problem?
3. Any cooperation with the government, private sector, EU, or academia on this matter?