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Preface

What awaits us in the future? While of course we cannot predict what's ahead, we can be sure of two things: Firstly, Norway will in the future continue to be dependent on preparedness and emergency response volunteers. In the event of an unwanted incident, accident or disaster, government agencies are simply not able to meet every need. We need people who are willing and able to step forward, who have been trained and have the necessary equipment. Secondly, we are also convinced that Norwegian society will increasingly be forced to manage multiple crises simultaneously. A pandemic can strike at the same time and in the same place as a disaster. A passenger ship could run aground at the same time as a landslide occurs on land.

How do disaster preparedness and emergency response stakeholders connect, and how can we ensure that affected people receive urgent assistance, food, shelter, and care? Disaster preparedness means looking beyond day-to-day life and assessing the challenges that we might have to face in the future. This entails thinking through situations that could arise, and knowing what knowledge, skills and systems would be needed to deal with them. What constitutes adequate preparedness today will not necessarily be adequate in 2050. Society is being changed and influenced by centralisation, demographics, technology, climate change – and developments within many other areas. These factors also affect disaster and emergency preparedness needs.

In this report, the Red Cross and the Institute for Social Research (ISF) present the results of the project entitled The Future of Volunteers in Disaster Preparedness and Emergency Response (in Norwegian, Fremtidens frivillige Beredskap). Together, we have analysed the events that could happen in the years to come, the extent to which society will be prepared, and – particularly – the extent to which the volunteer disaster preparedness organisations are equipped to meet

the needs of the future. Our main message as the Red Cross is simple: The disaster and emergency preparedness needs of the future can be reduced by investing in risk mitigation measures. Better preventive measures can reduce the scale of impacts in the event of a crisis or incident.

The climate crisis is, by far, the greatest threat to the welfare and security of mankind. The single most important mitigating measure is to cut greenhouse gas emissions, and thereby help stop global warming and its extreme impacts. Other measures are, however, also important. This includes increasing the focus on vulnerable groups in the disaster preparedness at both national and local level, and improving conditions for volunteer disaster preparedness organisations as well as municipal disaster preparedness work.

With around 40,000 volunteers, the Red Cross is Norway's largest voluntary humanitarian organisation. As a disaster preparedness organisation, we are ready to respond at a moment's notice, and we are a vital part of the Norwegian rescue service. Our role is to assist the authorities in the event of unexpected incidents when there is a need for extra hands and feet, equipment and effort. This implies a responsibility to prepare the organisation for what we believe might happen. In modern times, our ability to respond on a large scale over a protracted period of time has never been put to the test as thoroughly as it was during the pandemic. Volunteers contributed many hundreds of thousands of hours of work. Along with the rest of society, we gained a deeper understanding of what disaster preparedness actually means: that the first step is to accept that unexpected events can affect us all.

Anne Bergh, Secretary General of the Red Cross

1. About the project The Future of Volunteers in Disaster Preparedness and Emergency Response

As set down by Royal Decree, the Norwegian Red Cross has an auxiliary function to the Norwegian government in the area of humanitarian aid, and the organisation is part of Norwegian society's fundamental disaster preparedness and emergency response capacity. The Red Cross can, either at the request of the authorities or on its own initiative, mobilise to provide assistance in response to unwanted incidents and, where appropriate, provide equipment and personnel for the authorities to use. This mission requires us to be competent and prepared, not only for search and rescue operations, but also for operational support, and to provide social care and psychosocial support during other incidents.

To enhance our readiness for the disaster preparedness and emergency response needs of the future, in 2021 we therefore initiated the project titled The Future of Volunteers in Disaster Preparedness and Emergency Response in collaboration with the Institute for Social Research. The first step of the project was to look at the unwanted incidents that society may have to face through to 2050. The researchers at the Institute for Social Research reviewed

population and climate projections, registry data for search and rescue operations and literature concerning crisis scenarios and disaster risk.

To assess the quality of our preparedness for managing the types of incidents that could occur over the coming decades, and their likely scope, the researchers also conducted surveys and interviews with Red Cross volunteers, elected officers and staff. They also interviewed other voluntary organisations and personnel involved in disaster preparedness, response and emergency management within the Norwegian Police and the County Governor's office in several counties. You can read more about these in the methodology description at the end of the report.

The researchers' analyses and findings were discussed with the Red Cross throughout the process and published in *two lengthy, thorough reports*. The final report you have in your hands was written jointly by the Red Cross and the researchers. This report summarises the main findings of the project and puts forward recommendations for strengthening volunteer disaster preparedness capacity, in light of the research and the Red Cross' experience.



2. A changing risk landscape

Today's risk landscape is changing dramatically. The impact of climate change on weather and the seasons is changing where and how often natural hazards trigger unwanted incidents and events with the potential to cause damage and/or injury or loss of life. A tenser international security situation has already had consequences for Norwegian society and will continue to do so over the coming years. At the same time, other societal trends are changing the degree of vulnerability of people, institutions and local communities to known hazards as well as new hazards we have not seen before. Incidents our society has not encountered before, or not encountered in our lifetime, can and will occur in the future. Known hazards could increase in magnitude. Many driving forces will have an impact on Norway's future disaster preparedness needs and on the ability of society to meet those needs.

Demographic changes are resulting in an ageing population and increased urbanisation. The regional projections of the national statistical institute of Norway (Statistic Norway 2020) show that the Norwegian population is expected to grow by 11 per cent through to 2050, but with an uneven geographical distribution. For example, the combined population of Akershus, Buskerud and Østfold (the current Viken County) will grow by as much as 18 per cent. However, 140 municipalities are expected to see a decline in population. Young adults are moving to central areas and having children there, while older people are staying behind in rural areas. One consequence of this urbanisation is therefore a rapidly ageing population outside of towns and cities. The inhabitants of the rural municipalities are relatively old even now, and this trend will increase through to 2050. Virtually all the most geographically remote municipalities will have a population where more than 25 per cent of inhabitants are aged 70 or above. In some of these municipalities, the elderly will account for as much as one third of the population.

Demographic changes and urbanisation can affect the risk of unwanted incidents happening in a variety of ways. Increasing urbanisation can for example lead to pressure on the housing market and the need to build more homes and associated infrastructure. As a result, new homes may be built in areas which are vulnerable to natural hazards, such as areas with quick-clay or high flood risk (see Red Cross 2021 on municipal risk and vulnerability analyses). This increases the risk of unwanted incidents affecting people and homes. Furthermore, an ageing population will lead to a higher proportion of the population becoming dependent on public services to meet their health needs. More people will therefore become vulnerable to incidents which result in the disruption of public services, such as flooding or landslide damage to roads preventing community nurses from visiting patients, or health system overload as a result of a pandemic or other disease outbreak.

The pace of technological change in society at large is also impacting our exposure and vulnerability to hazards. Technological advances and digitalisation policies are increasing our dependency on electricity, satellite-based services and data exchange between information systems. Various functions in society are also becoming more closely interlinked. If an unwanted incident such as a solar storm results in the loss of satellite-based services, or if extreme weather leads to protracted power outages, Norwegian society's dependency on technology will be put to the test. The pace of technological change will therefore be a driving force that could increase the negative impacts of an event, e.g. as a result of communication tools ceasing to work. However, technological changes can also have the opposite effect, boosting disaster preparedness and emergency response capacity, provided that the technological infrastructure remains functional. In other words, technological innovations can make us both more resilient and more vulnerable.

Access to information and the ability to communicate about hazards, needs and ongoing incidents can have a considerable impact on the vulnerability of both individuals and groups. Due to the increase in linguistic diversity in Norwegian society, it is becoming more challenging to ensure that information and advice reaches everyone, e.g. in advance of extreme weather or during a disease outbreak. In areas of the country with a high proportion of inhabitants with immigrant backgrounds, the disaster preparedness stakeholders we interviewed were particularly concerned about language issues. The Norwegian Coronavirus Commission (2021) has also pointed to this challenge. Greater linguistic diversity may also lead to greater communication challenges during search and rescue operations.

On top of all this we have the effects of climate change, which are already impacting the Norwegian climate and will only become worse over time. Climate projections for Norway particularly indicate a greater likelihood of pluvial flooding, heavy rainfall with urban flooding, and sea level rise in the years leading up to 2050 (Norwegian Centre for Climate Services 2015, 2021a and 2021b). At the same time, research conducted by the Norwegian Meteorological Institute (2022) shows that heat waves in Norway have already increased in both number and extent. As our weather becomes more unpredictable, the risk of grave unwanted incidents increase. Some weather phenomena, such as heat waves, also have a more severe impacts on the elderly and people who live in urban areas. The effects of these phenomena are therefore amplified by societal changes such as the ageing population and urbanisation. In addition to these risks, we can also expect to experience the ripple effects here in Norway of the global impacts of climate change for disease outbreaks, food production, international trade and population movement.

To counter the forces that increase the risk of serious crises, measures which reduce the vulnerability of people and local communities before an unwanted incident are of particular importance. The studies conducted as part of The Future of Volunteers in Disaster Preparedness and Emergency Response indicated a consensus regarding the importance of investing in disaster risk reduction, so as to limit the scope of unwanted incidents in the future. Risk reduction measures will need to be cross-sectoral, and include climate adaptation, health systems, land-use planning, technology regulation, and research. Investments within these areas will have a major impact on the scope of risk which will have to be managed through disaster preparedness and emergency management towards 2050.

In addition to government-led risk reduction measures, the population's own preparedness will be vital in preventing an unwanted incident from escalating into a major crisis. Loss of life and health during the initial phase of an incident can be prevented if a sufficiently high proportion of the population can meet both their own basic needs and those of others for 72 hours. A high level of self-preparedness among the population will therefore ease the pressure on the emergency response organisations, enabling these actors to focus on the more extensive and acute aspects of the incident. Several of the county disaster preparedness and emergency planning managers we interviewed for The Future of Volunteers in Disaster Preparedness and Emergency Response were therefore concerned with promoting self-preparedness and take this into consideration when assessing their county's overall disaster preparedness.

The type of situations we need self-preparedness for, however, will be affected by climate change - both due to known hazards occurring in new places or lasting longer, and through the introduction of new hazards, such as heat waves and more serious outbreaks of water-borne diseases. It can therefore not be taken for granted that the knowledge on which the self-preparedness of the population is currently based will be sufficient in the future. Both the county disaster preparedness and emergency planning managers and our interviewees in the voluntary organisations were of the opinion that the population's





self-preparedness is currently considerably greater in areas that are more exposed to the weather and sparsely populated, and lower in urban areas.

The disaster preparedness and emergency response capacities of the future will have to be proportionate to the residual risk remaining where disaster risk reduction falls short. In our interviews with Norwegian public sector and voluntary disaster preparedness organisations, many emphasised that multiple simultaneous unwanted incidents could turn into unmanageable crises. Many of them also believe that situations where several crises occur at the same time could occur more frequently in the future, and that climate change could be an underlying driver. For example, adverse weather could result in major rescue operations, flooding and landslides all taking place at the same time. Another example of simultaneous

incidents would be a situation where a pandemic and extreme weather strike at the same time, creating a situation where it is more difficult than normal to mobilize personnel and resources from neighbouring counties or municipalities in order to manage an incident. As a result, there is a risk that not enough people and equipment will be available to respond to all ongoing incidents and prevent loss of life and assets.

A number of the Red Cross volunteers we interviewed noted that they already have to respond to simultaneous incidents, and that although they do make it work together, it is very demanding. In order to adapt to a changing risk landscape in the decades leading up to 2050, we must understand the societal changes that will characterise these decades and, more specifically, how they will affect disaster preparedness and emergency response capacity. We will consider this in more detail in the following chapters.



3. Societal changes affecting the Norwegian disaster preparedness and emergency response system

In the longer term, changes in society may also lead to changes in public administration, including how the authorities organise disaster preparedness and emergency planning. This will affect expectations towards voluntary disaster preparedness organisations such as the Red Cross. In the work on The Future of Volunteers in Disaster Preparedness and Emergency Response, centralisation and the reallocation of tasks and work distribution between the public and voluntary sectors were particularly identified as trends with direct consequences for the disaster preparedness and emergency response systems.

Centralisation

Centralisation is a trend in which small public administrative entities are merged to form larger entities through various reforms and political decisions. This can help to reduce public sector expenditure as a result of economies of scale, and it is often argued that centralisation can also help to boost the level of expertise within an entity by bringing together a greater number of specialists in one unit.

The municipalities, health service and operational police, fire, rescue and ambulance services all play vital roles in civil protection and emergency planning at the local level. Thus, centralisation measures such as the Police structure reform, the Municipal merger reform and changes in the hospital structure have direct consequences for how local preparedness and emergency management is organised and which capacities can be found in a community. In our data collection for The Future of Volunteers in Disaster Preparedness and Emergency Response, we looked in more detail at how these currently affect and could affect disaster preparedness and emergency response work in the 367 Red Cross local branches in future.

Most of the people we interviewed in the police and county governor organisations viewed merging small entities to form larger entities - for instance through the Police structure reform, municipal and regional mergers and the possible centralisation of acute medical hospital functions - in a positive light. For many of these people, it is easier to coordinate with larger entities than very small ones. Some went as far as saying that the municipal reform had been unsuccessful because it failed to reduce the number of small municipalities sufficiently.

In our work on The Future of Volunteers in Disaster Preparedness and Emergency Response, we also asked disaster preparedness and emergency response volunteers, i.e. Red Cross volunteers who have contributed to preparedness planning and response work during the year leading up to the questionnaire survey, for their views on centralisation processes. Around one in five of these volunteers consider centralisation to be one of the toughest challenges for disaster preparedness today. Many volunteers understand the expertise argument, but the majority still pointed out the tendency to roll back local emergency management capacity, leaving only the volunteers and municipal authority with vital knowledge of the local area. Many of the interviewees stated that the policing structure reform has increased the distance to the nearest police station for many people, and that police officers who lead operations are now less familiar with the local area where the operation is being carried out than before.

In other words, the police structure reform has affected both the accessibility to and the expertise of the police. In some places, volunteers find that they are the first to arrive at the scene, and that they possess knowledge of the local area

that the police, with its new structure, lack. On the other hand, the volunteers we interviewed stated that they believed that the police structure reform had also brought about benefits for emergency management capacities, partly because incident managers, e.g. in search and rescue operations, are now better qualified, and have extensive experience in this type of work.

Expectations towards the role of volunteers in emergency situations will in the future also be affected by the ongoing political debate regarding the centralisation of emergency medical services, versus maintaining a decentralised hospital structure. The outcome of this discussion could affect the capacity of the public sector to provide emergency assistance - and thereby also what roles that disaster preparedness and emergency response volunteers will be expected to take on in situations where lives are at stake. Many of the people we interviewed also said that they see it as a challenge that the emergency services have been geographically structured in disparate ways, partly because services have been centralised through different reforms. One interviewee from the Red Cross explained:

Nothing overlaps: The police collaborate with three Red Cross district branches, two regional health authorities and numerous fire services. The fact that there is no alignment makes for an excessive number of entities to coordinate with. Reforming one agency won't help; you have to reform them all.

Reallocation of tasks and division of responsibilities between the public and voluntary sectors

As with the police structure reform, municipal mergers are increasing the distances that need to be travelled in the context of disaster response and emergency response. In addition, they can also lead to renegotiation of the relationship between the voluntary sector and municipalities in many places. In this context, the role of

voluntary disaster preparedness organisations can be affected by the reallocation of tasks both within disaster preparedness and emergency management, and in their everyday collaboration with municipalities on activities for children, adolescents, the elderly and others.

Ideas concerning co-creation and co-governance are becoming more widespread in the Norwegian public sector (see for example Enjolras and Trætteberg, 2021). If one looks at the Norwegian way of organising disaster management and emergency management, for example, ideas about co-creation and co-governance have in a sense already been institutionalised through the "samvirkemodell" (best translated as a whole-of-society cooperative approach to disaster and emergency management) (see Chapter 5). As discussed above, in some places, increasing centralisation is resulting in disaster preparedness organisations being asked to take on even more duties in this cooperation. There is reason to ask whether this development will be further amplified by a broader tendency towards reallocation of tasks between the public and voluntary sectors, where voluntary organisations are increasingly being asked to take on more duties that were previously the responsibility of the public sector. The volunteers we spoke to said that they also recognise that the ageing population is putting pressure on health and welfare services in Norway, and that they are encountering changing expectations regarding the contribution of the voluntary sector. One Red Cross volunteer summed up the current situation this way:

The public sector is saying that more needs to be outsourced to the voluntary sector even if something is a municipal/central government task. But that is not actually our job. My experience is that this tendency has increased as a result of poor municipal policymaking: "Can we (the Red Cross) come to the residential and treatment centre at three set times

to distribute food and medicines to the elderly?" We absolutely must not do that. That is legally the duty of the municipality. We can mobilize a rota (of volunteers) for outings and be present at municipal activities, but we cannot operate (municipal institutions). We have volunteers visiting schools at break times, whose presence are meant to help create a welcoming and safe environment. There are a lot of activities that are right on the edge. It's OK when there's a crisis, but once it's over? Organising volunteers to sit vigil with people who are dying is already borderline, but the alternative is that elderly, sick people die alone. We must toughen up and speak up."

The interviews conducted as part of The Future of Volunteers in Disaster Preparedness and Emergency Response do not suggest that there is a unambiguous trend towards reallocation of tasks between the public and voluntary sectors within disaster preparedness emergency response. However, interviewees did note that the pandemic and refugee crises have made it clearer what volunteers are able to contribute.

The distribution of tasks clearly shifted during the pandemic, when volunteers carried out practical tasks at testing and vaccination stations over a protracted period of time. Although many volunteers found these tasks rewarding, the ones we spoke to began to struggle when the emergency response became protracted and phased into daily operations. According to the volunteers themselves, this type of event has also led some municipalities to see volunteers as a potentially "free" resource which will turn up whenever they are asked to. The Red Cross volunteers who were interviewed spoke of volunteers helping organise queuing systems and testing at several airports, while security guards were furloughed during the early stage of the pandemic. The volunteers said that, although it was acceptable to mobilise them in situations like that or for them to contribute at a national reception centre for refugees, paid workers must take over when the situation becomes protracted and the immediate emergency phase has ended.

When both the risk landscape and the collaboration between the public and voluntary sectors change, there will inevitably be consequences as regards the needs and expectations that volunteers encounter. We consider these in more detail in the next chapter.



4. The consequences of societal and climate changes for disaster preparedness and emergency response volunteerism

Disaster preparedness and emergency response volunteerism – freely chosen, unpaid participation in disaster risk management activities and emergency response through a voluntary organisation – is a particularly demanding form of volunteerism. In order to efficiently and safely carry out their duties during unwanted incidents and crises, volunteers are required to be both knowledgeable and flexible. Among other things, the cooperative model in the Norwegian preparedness and emergency management sector is based on voluntary organisations being able to recruit, train and retain enough volunteers in order to predictably mobilize when requested to.

Voluntary disaster preparedness organisations contribute in a variety of ways to this cooperative approach for disaster preparedness and management of unwanted incidents. The Norwegian Red Cross focuses on (a) recruiting and organising highly trained volunteers for local search and rescue operations, (b) on mobilising volunteers from other Red Cross activities for practical and social care tasks during unwanted incidents and crises, and (c) on improving first aid knowledge and self-preparedness among the population. The organisation's procedures for administration, training and mobilization have been set up so as to ensure the safety and competence of the volunteers while they are performing precisely these types of duties.



As mentioned previously, disaster preparedness and emergency response volunteers may be faced with expectations concerning new duties as a result of task reallocation within the collaboration with the public sector. In addition, changing risk factors such as the ageing population in rural areas and more extreme weather could lead to local emergency response actors having to respond to more extensive events, and more frequent simultaneous incidents in the future. Under these conditions, more volunteers will be needed for both familiar and new duties. To better understand the types of tasks that this could entail, we have analysed the types of roles it is natural for volunteers to perform in a number of the national crisis scenarios analysed by the Norwegian Directorate for Civil Protection (DSB 2019). We will review these on the next page.

The tendency for tasks to be reallocated between the voluntary and public sectors, combined with new and changing hazards, may force voluntary organisations to confront whether they are willing to take on responsibility for new duties, or duties which are currently the responsibility of municipalities. Examples of this include the provision of support for the sick and elderly during heat waves, extensive assistance during house and forest fires, training volunteers to provide emergency medical care, establishing alternative communication systems in the event of the loss of electronic communication systems, and – more generally – mobilise for assignments which require daytime attendance over an extended period of time. Volunteer organisations will have to make decisions regarding these types of questions and expectations based on capacity, mandate and their duty of care for their volunteers. It cannot be assumed that the answer will always be yes.

It is not unlikely that volunteer disaster preparedness organisation will have to face such questions while an unwanted incident or crisis is happening. During the period 2020 to 2022, the COVID-19 pandemic put the Norwegian preparedness and emergency management system to the test in a number of ways and through multiple waves of infection. Based on

the findings from a survey among the national voluntary organisations in Norway, Arnesen and Sivesind (2021) note that the voluntary sector was drawn into the COVID-19 response in ways that could not possibly have been described in an emergency response plan. The experience of the Red Cross is entirely consistent with this. The voluntary sector mobilised rapidly – "we stood at the airport fully trained and dressed in personal protective equipment 50 minutes after the municipality had first made contact," as one volunteer put it – but the tasks that awaited them during the COVID-19 pandemic were varied, new and protracted.

New tasks and roles affect what expertise and capacity that the voluntary disaster preparedness organisations must possess. Involvement in larger and more complex incidents not only requires disaster and emergency response volunteers to possess the competence to carry out these tasks, it also requires the organisations to have access to a sufficient number of volunteers to sustain mobilisation over time. In municipalities with high outward migration rates, this can be a major challenge – see Chapter 7. For some voluntary roles, the future will most likely also bring more advance competency requirements within crisis management, or technological expertise, in order to use new operations support systems and equipment such as drones.

Having the right expertise for the tasks at hand is only one of several important prerequisites that must be met for the voluntary disaster preparedness actors to be able to help manage the impacts of societal and climate change.

Collaboration with the public sector emergency management actors and the ability to engage and care for volunteers are other essential prerequisites that must be met in order to increase our capacity for handling a changing risk landscape. In the following chapters, we look at what the findings of The Future of Volunteers in Disaster Preparedness and Emergency Response can tell us about local collaboration, and the engagement of volunteers.

What duties can volunteers be asked to take on in future disaster preparedness and crisis response?

One component of our work on The Future of Volunteers in Disaster Preparedness and Emergency Response was to explore the preparedness and response roles and duties that volunteers may be asked to take on over the coming decades. To do this, we examined the tasks that volunteers might be asked to perform in a selection of the national crisis scenarios, as well as the types of tasks that Red Cross volunteers in countries similar to Norway are asked to do in response to climate change impacts. We have also carried out scenario analyses of how the country's current approach to disaster and crisis preparedness could be affected by changes in (a) the willingness of volunteers to commit, (b) the level of trust in society and (c) the resources of the public sector.

Known tasks which local volunteers currently perform, but more frequently and under tougher conditions

Volunteers play a key role in the Norwegian search and rescue service. During and after extreme weather, storms and flooding (all of which are expected to occur more frequently in the future), there may be a particularly great need for their efforts. Volunteers are also expected to mobilize for search and rescue operations, even if these coincide with other events, such as pandemics and nuclear incidents. In these conditions, it is essential to have a sufficient number of volunteers with the right training and equipment to perform their duties safely.

Many of the Red Cross' local branches already relieve the pressure on the health service by providing patient transport services. During the COVID-19 pandemic, substantial and lasting pressure on the health service led to the Red Cross being requested to take more patient transport assignments, along with requests for operational assistance to testing and vaccination stations (i.e. task shifting). Providing this type of intensified and protracted assistance to the health service requires the Red Cross to mobilise volunteers over a prolonged period of time, and to be clear about exactly when it is natural for the Red Cross to contribute.

The COVID-19 pandemic made it clear just how important social contact is for people who are already in a vulnerable life situation, or who are directly affected by an event – such as children and young people during the pandemic. In a situation of a protracted crisis or where unwanted incidents such as acts of violence leave their mark on a local community, the Red Cross considers continuation and adaptation of our activities for children, young people and other vulnerable groups an important part of our response.

Known tasks, but which very few local volunteers currently perform on a regular basis

Even today, the Red Cross is asked to assist in responding to major incidents by providing equipment and volunteers for practical tasks. This includes transportation during and after a fire or extreme weather event, distribution of food and firewood to people who are trapped by heavy snowfall, organisation of queues at vaccination centres and emergency reception centres for asylum seekers, and distribution of water during water contamination incidents. An increase in the number and extent of climate-related incidents will lead to an increase in the number of volunteers needed for this type of work. Although the work is not technically advanced, volunteers will still need to be given sufficient guidance to perform these duties in a coordinated manner.

Another type of task that the Red Cross is already being asked to help with is the provision of care for people who have been affected by unwanted incidents. In this type of work, the strength of voluntary emergency response volunteers is that they can help comfort people affected by crises through fellowship, and since the Oslo and Utøya terrorist attacks in 2011, the Norwegian Red Cross has worked to ensure that all volunteers can provide psychosocial support. This expertise is already being utilised today at centres for disaster evacuees and others crisis-affected people, and at emergency reception centres for asylum seekers and refugees.

The Norwegian Red Cross is already helping to **disseminate and explain information and warnings from the government.** This normally takes place as part of the organisation's media work, but it has also included tasks following the loss of electronic and radio communications . In the event of communications disruptions due to a solar storm or prolonged power outage, volunteers could potentially be asked to help with systematic door-to-door alerts. Experience from other Red Cross National Societies demonstrate that providing early warning requires good guidance, coordination and the training of volunteers.

Unknown tasks as an extension of the activities that volunteers already carry out

At present, municipal home health nurses are responsible for meeting the multidimensional needs of the sick and elderly living at home, while the Red Cross Visitor Service provides companionship. In other European countries, volunteers from the Red Cross have been asked to conduct welfare visits to the elderly during heat waves. Welfare visits require local emergency plans as well as volunteers with the appropriate first aid training.

Technology plays an increasingly important role in both search and rescue operations and crisis response operations. If technological tools change significantly, volunteers may be asked to take on technical operator roles that we cannot yet foresee.



5. Disaster preparedness and emergency management cooperation at the local level

Under to the Norwegian civil protection approach, the country's disaster preparedness and emergency management structure is organised according to four principles (Samfunnssikkerhetsinstruksen, 2017). The responsibility principle means that the party that is responsible in a normal situation should also be responsible in a crisis. The equality principle means that the organisation during a crisis should be as similar as possible to the organisation during normal daily operations. The proximity principle means that crises must be managed at the lowest possible level and as close as possible to the location affected by the crisis. The principle of cooperation states that "authorities, organisations and agencies have an independent responsibility to ensure the best possible cooperation with relevant actors and organisations in the work relating to prevention, preparedness and emergency management" (Samfunnssikkerhetsinstruksen, 2017, Chapter III point 4).

It is the fourth and final principle, the cooperation principle, which requires the various actors involved to cooperate as regards emergency planning. This principle is also known as the "samvirkemodell" (best translated as a whole-of-society cooperative approach to disaster and emergency management) and has deep historical roots in Norwegian emergency response practices. Following the bombing in Oslo and the shootings on Utøya on 22 July 2011, it was also put forward as a national governance principle (Skiple and Winsvold, 2020). This whole-ofsociety cooperative approach is about more than just collaborating on a given task. The approach entails an overarching, higher-level collaboration which also sets the standard for cooperation at lower levels as well (Skiple and Winsvold, 2020; Aasland and Braut, 2018). However, stakeholders do not make a sharp distinction between collaboration and cooperation.

Though the role of volunteers in the preparedness and emergency management system is not regulated by a specific law, under current legislation¹, municipalities and the police are required to coordinate and cooperate with the voluntary organisations because the organisations are relevant stakeholders who are able to contribute to the various arenas and structures forcollaborative disaster preparedness and emergency management.

In a preparedness and emergency management context, important formal arenas for local cooperation important formal arenas for local cooperation include the County Emergency Council, municipal emergency councils and the Operational Management Group ("redningsledelsen" in Norwegian) at the Joint Rescue Coordination Centres (JRCC) and local rescue coordination centres (LRS). Written cooperation agreements help ensure good planning and the clarification of expectations regarding roles, coordination and resources, while actual incident response and joint exercises put the "theory" both into practice and to the test. Key to all these structures and arenas are the need for coordination and collaboration.

What works well in this cooperation, and what can be improved further? Our findings show that collaboration and cooperation is good across all stakeholders, but also that there is room for improvement, particularly in the collaboration between the voluntary organisations and the municipalities. The public sector and voluntary actors have a fairly consistent understanding

¹ See the Police Act and the Act relating to the municipal preparedness duty, civil protection measures and Norwegian Civil Defence, as well as the Regulation on municipal preparedness duty.

of how the cooperation model is meant to work. Such a common understanding or shared narrative regarding "how we do things" helps ensure that the coordination of resources works smoothly when a crisis happens. For frequent incidents such as rescue operations, there are standardised procedures in place for cooperation, and the coordination of voluntary and public sector resources has been adjusted and optimised on the basis of shared experience. The same applies to major isolated incidents of a certain scope, e.g. the Viking Sky cruise ship engine failure incident in 2019 and the avalanche in Beisfjord in January 2022, where a whole village was cut off for several days. Interviewees in both our study and previous studies stated that the voluntary and public sector organisations were able to improvise and collaborate effectively during the critical phase of such incidents, when life and health are at risk, the (see also Skiple and Winsvold, 2020) - particularly because they trust each other (Krogh and Lo, 2022; Aasland 2022).

In situations that are less critical and that occur rarely or for the first time, the mechanisms and conditions of collaboration must to a great extent be negotiated. The ideal cooperation situation where everyone contributes to the best of their ability, and the resources are coordinated effectively, is described as ideal precisely to emphasise that many situations deviate from the ideal. The ideal cooperation does not come about by itself, but has its basis in a variety of structures and resources, the presence of which will vary in different local communities and in different types of partnerships. For example, data from both The Future of Volunteers in Disaster Preparedness and Emergency Response and previous studies show that the cooperation between the police and voluntary sector in rescue operations is largely perceived to work very well, whereas that between municipalities, municipal agencies and voluntary organisations is far more variable (Gjerde and Winsvold, 2016; 2017; Skiple and Winsvold, 2020).

The collaboration between municipalities and the voluntary sector has become more extensive due to the pandemic and the increasing number of refugees and asylum seekers. Although the voluntary sector is afforded recognition for its contribution, our findings from *The Future* of Volunteers in Disaster Preparedness and Emergency Response indicated that there is a need to better clarify expectations between the voluntary sector and the municipalities as regards roles, contributions and duration of assignments.

All the stakeholders we interviewed pointed to a need for more joint exercises (see also Aasland, 2022). As per the Regulation on the municipal preparedness duty, the municipalities have a duty to review available resources and involve relevant actors in preparedness planning and exercises. The extent to which this actually happens, varies. At present, there are incidents for which plans have been drawn up at national level, but which cannot be prioritised for local or county level planning or exercises due to a lack of capacity. Joint exercises and evaluations can help to better prepare both the voluntary sector and the public sector to deal with new types of incidents as well as increasingly frequent incidents in the future, as more stakeholders will have collaborated together previously. At the same time, an increase in the number of incidents taking place could give rise to more continuous collaboration, making it easier to prioritise what needs to be practised.

During the key informant interviews, personnel from the voluntary organisations stated that they wanted to have more joint exercises with the other preparedness actors, particularly the police, fire service, the Norwegian Civil Defence and, where appropriate, the municipalities. None of these actors view inclusion of the voluntary organisations in joint exercises negatively, although actual instances of it happening are too rare - even in the opinion of the public sector stakeholders.

Although levels of trust in the expertise and operational capabilities of other stakeholders are high across the board, the key informants working for municipalities highlighted that there is an uncertainty involved in mobilising volunteers, because they do not feel certain

that the volunteers will actually turn up. The police, however, do trust volunteers to mobilize in situations where life and health are at risk, because their experience is that volunteers do turn up.

This difference in degree of trust can be explained by several factors. Firstly, when the emergency response volunteers contribute to police-led operations, their role is regulated by the rules of the rescue service, with clear mandates and lines of responsibility and command. The way in which municipalities and the voluntary sector cooperate, on the other hand, is to a great extent up for discussion during the unwanted incident itself, with a greater expectation of operating independently among the volunteers. Secondly, the police request assistance in situations where there is an acute risk to life and health, which greatly motivates for response. Volunteers do not hesitate to turn up for municipalities during emergencies, e.g. if people have to be evacuated and cared for following a landslide. Thirdly, reciprocity matters. The police clearly state that they trust volunteers to turn up, that they trust in the competency of the volunteers, and that volunteers have a clear place in the police's emergency response plans for various situations. The relationship between the voluntary sector and the municipalities, however, is far less settled. With more extensive collaboration likely to be needed in the future, there is a need for more clarity in the relationship between the volunteer sector and the municipalities.

The need for collaboration between municipalities and voluntary disaster preparedness organisations is expected to increase in the future as a result of the changing risk landscape. One of the Red Cross volunteers we interviewed sees the likely development as follows:

The Red Cross will probably become more closely linked to the municipal sector in the future as regards preparedness and emergency response. We now have a much stronger focus on what the municipalities' responsibilities include. Forest fires are now a municipal incident, not a rescue operation. Previously, municipalities relied on the rescue service to a much greater extent. The municipalities are poorly prepared for this."

Closer collaboration and clarification of expectations between municipality and disaster preparedness organisations will be important in order to maintain and strengthen local preparedness capacity in the future.

In the next chapter, we therefore look more closely at conditions and factors that strengthen the collaboration between Red Cross local branches and the municipalities.



The Red Cross Assessment

The Red Cross Assessment is a four-step method used by Norwegian Red Cross when initiating new activities or assessing whether existing activities should be continued. According to the Red Cross Assessment, our activities should meet four criteria:

- 1. There must be unmet needs amongst people in vulnerable situations.
- The initiative naturally aligns to our mandate and is in accordance with our 7 Fundamental Principles
- No other organizations with better competency or a natural mandate are already dealing with the needs
- 4. The Red Cross has the competencies and resources to successfully implement the initiative



6. The collaboration between the Red Cross and the municipalities

Just like the other Norwegian civil protection, disaster preparedness and emergency response stakeholders, the Red Cross strives to follow the four principles for civil protection and emergency management. In line with the proximity principle, unwanted incidents must be managed as closely as possible to the place where they occurred. In a Red Cross context, this means that most activities are managed and implemented by the local branches – which normally cover part or all of a municipality. It is as a member of a local branch that most volunteers carry out their day to day, hometown Search and rescue corps. Social care or Red Cross Youth activities, and it is the local branch elected officers who manage branch administration, recruitment and local

fund-raising activities. Similarly, it is the local branch search and rescue volunteers who are called out by the police in the event of search and rescue operations, and the local branch board that is the municipality's counterpart in disaster preparedness context. If no other agreements are requested or in place (such as the simultaneous call-out of all search and rescue volunteers across an extended area)², local incidents and governments requests for assistance are primarily handled by the volunteers and elected officers of the local branch.

The municipalities are key partners for the Red Cross local branches, for day-to-day matters as well as preparedness and emergency response

² Local branches can always ask the rest of the Red Cross structure for assistance and support during an emergency response. Tasks such as training delivery and the convening of specialist technical groups are often organised at county or regional level.

activities. The Red Cross' ambition and objective is therefore for all local branches to have disaster preparedness collaboration agreements with their home municipality. According to the Red Cross' own overview, written collaboration agreements have so far been established in 63 per cent of Norwegian municipalities.

Collaboration agreements enable municipal employees and volunteers to get to know each other better. This familiarity lowers the threshold for making contact when something happens. At the same time, some interviewees noted that their local agreements are dormant, and that the municipality may not recall the agreement in the event of an incident. As a result, volunteers are often mobilized for action at a later stage than originally agreed. According to the questionnaire we conducted among local Red Cross presidents and Search and Rescue Corps leaders, only 69 per cent of local Red Cross branches are part of an established municipal warning procedure in the event of critical and unwanted incidents in the municipality.

To study practices of collaboration between the Red Cross and the municipalities on disaster preparedness and disaster risk reduction, we conducted a survey among our disaster preparedness leaders at municipal level – i.e. local branch presidents and leaders of the Red Cross Search and Rescue Corps – concerning the type of contact or collaboration they had had with their home municipality in the past two years. 51 per cent of respondents stated that they had provided input for municipal preparedness plans, 25 per cent had provided input for risk and vulnerability analyses, and 66 per cent are members of their local emergency management council. Twenty per cent stated that they have also been in contact with their municipality regarding other matters. Examples of other these other issues that the local branches had been in contact with the municipality about, or collaborated on, include the COVID-19 pandemic response, collaboration agreements, and humanitarian response to sudden and significant changes in the number of refugees being settled in the municipality. Some leaders also mentioned that they had organised training exercises or

courses for the municipality.

In general, the majority of local branches who have collaborated with their municipality in the past five years – 95 per cent of local branches - stated that this collaboration has worked well. Of these, 40 per cent *moderately* agreed and 40 *strongly* agreed with the statement "We collaborate well with the municipality". The high proportion reporting to have collaborated with their municipality can largely be attributed to the COVID-19 pandemic.

Although the municipal employees we interviewed expressed concern about whether volunteers would actually mobilize when asked to, experience from the COVID-19 pandemic suggests that during challenging incidents, local Red Cross branches (and other voluntary organisations) do step up and provide support to the municipality in a variety of ways. This view is also confirmed by the results of the survey among Red Cross local branch presidents, with 9 out of 10 answering in the affirmative when asked whether their local branch feels obliged to respond when the municipality asks for their assistance.

The findings of the Red Cross local branch president survey – illustrated below – show the importance of reciprocal contact on a day-today basis. Frequency of contact appears to be an important factor in determining how local branch presidents assess their collaboration with the municipality. The less frequent the contact, the less the local branch presidents felt that the municipality listens to them and provides them with the information they need. It is also important to note that more frequent contact was associated with the local branch presidents feeling more strongly that they and the municipality have a common situational understanding – a prerequisite for effective collaboration in an emergency response situation. Local branch presidents who were in frequent contact with their municipality had a significantly stronger sense that the municipality assess risk in the same way as they do, and that there is a common understanding of the challenges that must be managed.

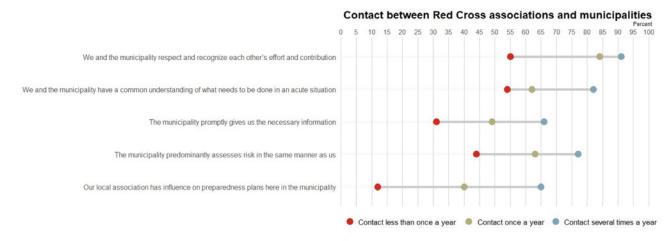


Figure 1. Proportion of interviewees in the leader survey who strongly or moderately agreed with the statements, disaggregated by frequency of contact with the municipality (%).

All stakeholder groups that we interviewed – county preparedness and emergency managers, volunteers and the municipalities themselves - considered inadequate municipal resourcing to be a particular challenge for preparedness and emergency management cooperation. It was noted that in municipalities below a certain size, the position of preparedness officer only constituted a part-time position, and that holders of this position have many different areas of responsibility. Figures from the Norwegian Directorate for Civil Protection's municipal survey for 2020 show that in 95 per cent of the country's municipalities, the preparedness officer position only makes up 5% or less of a single full time position in the municipal administration. Only 28 municipalities had one or more employees whose positions were fully dedicated to preparedness and emergency management. Consequently, it becomes difficult for the municipal preparedness

officers to find the time to build partnerships with voluntary organisations, or to include them and other relevant groups in preparedness planning processes. The Directorate for Civil Protection's municipal survey in 2018 also showed that the involvement of municipal preparedness officers/coordinators in the risk and vulnerability analyses underpinning land-use planning – an important arena for preventing natural hazard-related incidents - is limited.

Having the right person, with enough time, is not only important for the municipalities. People – volunteers - are the most important resource enabling voluntary disaster preparedness organisations' to live up to the government's trust and expectations, and to contribute effectively to saving lives and protecting the local community. We will look at the volunteers in more detail in the next chapter.

7. Preparedness and emergency response volunteers

Preparedness and emergency response volunteers are unpaid, and the work can be demanding. For the organisations who recruit and look after preparedness and emergency response volunteers, it is becoming increasingly important to

understand what motivates people to spend their free time providing care for crisis-affected neighbours, and what makes it possible for volunteers to head out late, on a cold autumn evening, to search for a person missing in the forest. There is no previous systematic research into preparedness or emergency response volunteers as a group, or into their motives for becoming involved in this type of volunteerism. The Red Cross and the Institute for Social Research have therefore used *The Future of Volunteers in Disaster Preparedness and Emergency Response* as an opportunity to investigate and contribute to a better understanding of this group.

Who are these preparedness and emergency response volunteers? Within the Red Cross, all new volunteers – regardless of whether they join the Search and Rescue Corps or the Visitor Service, whether they become a board member or volunteer in activities aimed at children and young people – are made aware that as a volunteer in a disaster preparedness organisation, they may be asked to help respond in an emergency. All Red Cross volunteers and staff must complete a basic course in physical and psychosocial first aid. They are also informed that as a volunteer in a disaster preparedness organisation, they may be asked to carry out basic preparedness and response support duties as and when necessary, such as transport provision and information dissemination. Many volunteers join the Red Cross Search and Rescue Corps and therefore focus on first aid and search and rescue operations as part of their everyday volunteering. In our research for The Future of Volunteers in Disaster Preparedness and Emergency Response, we therefore decided to look at both all Red Cross volunteers who have taken part in preparedness and emergency response as one group and the Search and Rescue Corps volunteers as a sub-group of this.

The 2021 Red Cross Volunteer Survey (Røde Kors Frivillighetsundersøkelse) a questionnaire survey that was distributed to all Red Cross volunteers – included a question asking the respondent whether they had contributed to preparedness or emergency response in the past 12 months. Preparedness and emergency response was clearly and broadly defined in the survey and included pandemic response, responses to other unwanted incidents and search and rescue operations. We posed many questions to both

preparedness and response volunteers in general as well as to the Search and Rescue Corps volunteers, and some questions to the latter only.

The answers given indicate that the Red Cross' preparedness and response work is carried out by a good mix of new recruits, volunteers with a few years under their belt, and veterans. Search and Rescue Corps volunteers differ in that many of them have been doing it for a long time. No fewer than 60 per cent of the Search and Rescue Corps volunteers have been volunteering for more than six years, compared with just under 30 per cent of preparedness and response volunteers from other parts of the Red Cross. Red Cross volunteers also have a fairly even age distribution, with a concentration among the oldest (around half are aged 60 or over). Again, search and rescue volunteers differ in that they are somewhat younger. Just 9 per cent of search and rescue volunteers are aged 60 or over, compared with 59 per cent among volunteers elsewhere in the organisation. For volunteers in Red Cross Youth, the average age is around 20 years.

Key informant interviews with volunteers in the Red Cross and other organisations involved in voluntary disaster preparedness show that one motivational factor is particularly prominent, and that is a desire to help – to help out, to help others, and to provide help when help is needed. For example, the volunteers we interviewed said that when the pandemic struck, they could not just "sit there and watch it all unfold on TV," as one Red Cross volunteer put it. They wanted to "help out, make a difference". This is the main motivational factor behind most people's decision to volunteer.

The figures from the volunteering survey show that volunteers involved in search and rescue and evacuation operations are highly motivated (with the average score being 8.6 on a scale from 0 to 10). Search and Rescue Corps volunteers have to undergo a longer training process than other volunteers, and many people in the Red Cross mention this as a motivational factor for staying on, precisely because they have invested

more in the organisation. It was also emphasised that the work itself is motivating, and that people are motivated by using their skills. One of the volunteers we interviewed explained it this way:

The work itself is the biggest motivator. It's about meeting expectations too. People who find that these expectations are met become motivated. Frequent mobilization is also a good motivator. Two times a year is not really enough."

Despite the high level of motivation, many interviewees from the Red Cross stated that "life-long" commitment appears to have become less common. There are also fewer families in which "everyone" is a volunteer. Volunteers spend many hours on the Red Cross work: The Volunteer Survey shows that those who responded, regardless of activity, had spent an average of 17 hours in the past four weeks doing voluntary work for the Red Cross. Volunteers in the Search and Rescue Corps estimated that they had spent an average of 25 hours, while other volunteers estimated that they had spent an average of 13 hours.³

The Red Cross volunteers are split roughly down the middle regarding how they prefer to volunteer. Many of the Search and Rescue Corps volunteers prefer variable rather than fixed times. This is not surprising, as they can be mobilized for duty at any time of day, while volunteers involved in other activities can.

The volunteering survey shows that around half of search and rescue volunteers say they generally turn up when asked to, though the proportion who report this is lower in some parts of the country. At the same time, the Norwegian Red Cross' own operational support tools show that actual attendance rates are lower. This discrepancy may be due to it being the most active volunteers who chose to respond to the questionnaire. Volunteers in full-time

employment report turning up turn up with the same frequency as that reported by volunteers who are not in full-time employment. The youngest volunteers (those under 30) say 'yes' to mobilizing slightly more often than the other age groups - 59 per cent in this young group often or always say 'yes'. However, there is no significant difference in the tendency to say 'yes' among those with children compared to those without.

Work and family life do not appear to be obstacles to volunteering for search and rescue operations, but in the case of longer operations, lack of leave from work can in practice be a barrier to mobilisation. This challenge is highlighted by the National Rescue Council (Redningsfaglig Råd, 2018), among others. While the Norwegian Civil Defence has a system for salary compensation, there is no sectorindependent scheme for disaster preparedness and emergency response volunteers. It is unclear how many volunteers consider this to be a problem at present, or the extent to which it affects the mobilisation of volunteers for search and rescue operations, or other emergency responses and training exercises.

When we look ahead to the preparedness needs of the future and society's ability to meet those needs, we should ask ourselves what the lessons we have learned about today's preparedness and emergency response volunteers could signify in the context of changes in society and the risk landscape facing us.

The changing risk landscape makes it likely that we will see an increase in the number of unwanted incidents in the future. Meanwhile, the number of search and rescue operations is already rising (see Chapter 8). This rising workload could be compounded by pressure on volunteers to take on more duties, as a result of the reallocation of tasks between the voluntary and public sectors, both on a daily basis and during unwanted incidents. Situations may arise more frequently in the future where volunteers in employment must consider loss of income against their engagement in emergency response.

³ Note that, in these calculations, we have removed a few responses with a very high number of hours, as these responses could easily have been entered erroneously as actual hours over the past four weeks.

Likewise, employers may more frequently have to weigh the drawback of an employee's absence due to volunteering against the positive aspects of their volunteering. Therefore, the lack of salary compensation schemes could become a potential barrier to the general scaling-up of preparedness and emergency response volunteerism in the future, irrespective of the current situation.

Perhaps the most important statistic of all is that around 40 per cent of preparedness and emergency response volunteers in the Red Cross consider it a challenge that other volunteers do not wish to commit. Because we do not have any comparable previous data, we do not know whether this is a new or a growing concern, or whether it has been at the same level for many years. The interviews seem to indicate that the tendency for volunteers not to commit has become stronger, or at least is perceived to have become stronger. Many people in leadership positions across different Norwegian voluntary organisations report that although there is a small, core group who always turn up, this group of people has decreased in size in recent years. If this group of volunteers becomes very small, it could affect the ability of the organisation to recruit, follow up and mobilise enough local volunteers to take part during unwanted incidents.

Numerous factors could potentially contribute to such a development. One trend in the answers to the Volunteering Survey is that many volunteers state that they wish to take part sporadically, without committing themselves. This desire is strongest among young volunteers. This may be a sign that today's young people have a fundamentally different attitude towards volunteering compared with previous generations, and that the way in which people volunteer will continue to change. It may also be that the desire to contribute on a flexible basis is linked to life phase, and that the preferred way of participating in volunteer operations will change as today's young volunteer cohort ages. Having said that, it is a major advantage that search and rescue volunteers want flexibility as volunteers, as this type of emergency response is intermittent in nature. Search and rescue operations

and other unwanted incidents are by definition unpredictable. If an incident becomes prolonged, such as a pandemic or epidemic, greater use may be made of the parts of the organisation that prefer and are able to participate in predictable, regular work.

There is also reason to believe that the capacity of both the Red Cross and other Norwegian preparedness organisation will be affected by the trend towards a decreasing and increasingly older rural population. As mentioned earlier, an increase in the size of the rural elderly population means greater pressure on the public sector and more people with a greater need for assistance during an unwanted incident in a rural location. In addition, there will be fewer people who can potentially be recruited by the volunteer preparedness organisations, both for general volunteering and more physically demanding tasks such as search and rescue in rugged terrain. Findings from the Red Cross' project entitled The Future of Volunteerism (Fremtidens frivillighet, Red Cross, 2023) show that the elderly, i.e. people of retirement age or older, already constitute the majority of people who stop volunteering for the Red Cross due to their age or health concerns.

Volunteers will have more to do with fewer people to help them. This applies not only to preparedness- and response-related work. Although the Red Cross supports its local branches at both national and county level, local branch leaders and elected officers have to perform essential tasks such as board duties, recruitment and follow-up of new and existing volunteers, equipment maintenance and fundraising. In the 2021 Volunteering Survey, 59 per cent of the volunteers who participated said they were not interested in holding an office or in managerial or administrative duties. If there are not enough people to carry out administrative and support tasks, preparedness and emergency response capacity will decline. In turn, this could demotivate the remaining volunteers, even those who are currently highly motivated.

Technological developments may to some extent mitigate some of the consequences that

an ageing and shrinking rural population on disaster preparedness and emergency response volunteerism. For very many people, working life has become more flexible as a result of technological advances making it possible to work from home, a development which was reinforced by the pandemic. This trend could make it easier to live in rural areas and work for an employer based in a town or city, and to take part in voluntary preparedness and response activities. With more "work from home", the role of the workplace as a point of social belonging could be reduced, leading them to seek out other arenas for meaningful community and social interaction. Tendencies in this direction could draw more people into volunteering. Technology could also facilitate the "universal" mustering of all volunteers who are nearby when an incident occurs. This kind of call-up could enable rallying of volunteers who are merely in the area on holiday

or passing, even if they do not belong to the local branch.

Although technology creates opportunities, it must be acknowledged that there are strong societal forces at play which must be managed in the context of preparedness and emergency response volunteerism. Hence, challenges – particularly in the smallest municipalities – will have to be overcome in order to manage future risks and maintain dependable, locally rooted preparedness and response volunteer capacities.

Search and rescue operations are among the most frequent types of incidents that must be managed. In the next chapter, we will therefore look more closely at the conditions that enable the maintenance and reinforcement of the Red Cross Search and Rescue Corps, and the mobilisation of volunteers for search and rescue.

8. Red Cross Search and Rescue Corps and participation in search and rescue operations by volunteers

As mentioned previously, the local mobilisation of highly trained volunteers for search and rescue operations represents one of the core functions of the Red Cross as a disaster preparedness and emergency response organisation and auxiliary to the Norwegian government. The primary duty of the Red Cross Search and Rescue Corps is to provide assistance for search and rescue operations in Norway. New volunteers not only have to demonstrate their own personal suitability; they also have to undergo extensive training for the various duties they will have to perform. Regardless of whether this is searching for missing persons with dementia, conducting mountain rescue operations, or performing water rescues, Search and Rescue Corps volunteers must be able to perform the tasks they are asked to assist with in a competent and safe way.

A review of data from the Joint Rescue Coordination Centre (JRCC) concerning onshore search and rescue operations during the period 2010 to September 2021 shows that there was a marked rise in the number of operations in general during this period, and a distinct increase in the number of operations involving the Red Cross in particular. The search and rescue operations analysed cover catastrophic events such as the Gjerdrum landslide, in which many people either went missing or were killed, as well as searches for missing persons. However, they do not include the off-road rescue operations which the Red Cross carry out at the request of the Emergency Medical Communication Centre (Akuttmedisinsk kommunikasjonssentral or AMK).

The Norwegian Red Cross mobilises for virtually all the search and rescue operations for which our assistance is requested. The organisation takes part in an average of approximately 20 per cent of all Norwegian search and rescue operations, and in a higher proportion (over 30 per cent) if we only consider search operations for missing persons, and landslide- or avalanche-related search and rescue. The organisation participates in almost half of all operations related to avalanches. The proportion of operations with a Red Cross presence is reduced by the fact that not all operations are suitable for participation by volunteers. The northernmost counties have the most operations relative to population size, but it is Oppland and Telemark that have the highest proportion of operations in which the Red Cross takes part (during the period 2010 to 2019).

In 2020, the Norwegian Red Cross took part in over twice as many operations as in 2010. This increase over time, combined with the assumption that society is set to face more unwanted incidents in the future, means that the Norwegian Red Cross expects to be asked to take part in an increasing number of operations going forward. To meet this demand, the organisation needs to have sufficient volunteers with the right training in place around the country.

Among today's volunteers within search and rescue and evacuation in the Red Cross, no fewer than 94 per cent say they moderately or strongly agree with the statement "I have sufficient skills to perform the duties that are assigned to me." Eighty-six per cent moderately or strongly agree that "the Red Cross offers sufficient training to its volunteers". Slightly fewer moderately or strongly agree that they have the technology (76 per cent) and equipment (82 per cent) they need to carry out rescue operations. Only 21 per cent strongly or moderately agree that "We practise as much as needed for rescue operations with the police, other agencies and other organisations." The survey data at an individual level therefore indicates that there is generally a positive perception that the basic conditions for ensuring good response capacity for search and rescue, except as regards joint simulation exercises. This

is also supported by the data obtained from the interviews.

In the survey of Norwegian Red Cross local leaders, local Search and Rescue Corps leaders reported that over the past five years, the Red Cross has collaborated broadly, with a range of other disaster preparedness organisations, both during and outside of operations. Ninety-three per cent have collaborated with Norske Redningshunder (Norwegian Rescue Dogs), 78 per cent with the Norwegian People's Aid, 24 per cent with the Norwegian Radio Relay League, 13 per cent with Speidernes Beredskapsorganisasjon (the Norwegian Guide and Scout Association's emergency group) and the Norwegian Women's Public Health Association, and 9 per cent with Norsk Alpine Redningsgrupper (Norwegian Alpine Rescue Groups). In general, Norwegian Red Cross leaders find the collaboration with all of these actors to be good.

In light of the expectation that the future will bring a larger volume of incidents as well as more major incidents, it may be necessary to strengthen the collaboration with disaster preparedness organisations further, particularly if volunteer recruitment and willingness to commit to mobilising declines. More joint simulation exercises and more interaction outside the operations where the police (LRS) has requested assistance might help to strengthen collaboration across organisations in the event of major and/or simultaneous incidents. Such coordination, particularly of search and rescue operations, currently takes place through the voluntary organisations' rescue forum (Frivillige Organisasjoners Redningsfaglige Forum or FORF), but not all the organisations mentioned above are members of this forum.

The contribution made by the Red Cross' local branches to the Norwegian health preparedness apparatus is considerable and covers many different types of tasks. One in three local branch presidents say they have established a collaboration agreement with the regional health authority, although this type of assistance is also carried out even if no written agreement is in

place. During the interviews, the interviewees talked about an ever-increasing number of "health assignments", particularly within transport provision. Because of their expertise, it is the local branch Search and Rescue Corps volunteers who carry out patient transport assignments for the regional health authorities. The increase in the number of transport assignments is often linked to the COVID-19 pandemic, but also appears to be a general trend. The Red Cross' own activity figures confirm this tendency. In 2021, volunteers from the Red Cross participated in a total of 4,291 on-road ambulance assignments. This represents an increase of over 18 per cent since 2020 (Red Cross, 2022b). The observed increase in the number of health assignments indicates that there is a need for more and better agreements with regional health authorities to ensure strong collaboration within this area of preparedness and emergency management.

When considering the capacities needed to ensure adequate local preparedness and emergency management capacity, it is important to note that the Red Cross' assistance to the regional health authorities are in addition to the search and rescue operations that are included in the JRCC data. Among other assignments that local search and rescue volunteers take on, first aid provision at sporting or cultural events is particularly common. Volunteering at the first aid station can provide an opportunity for volunteers to practise first aid skills, but these assignments are primarily important as a source of organisational income to cover the costs that the local branch incur relating to vehicles, fuel, equipment, exercises and expenses linked to new technological tools.

Earlier in this report, we mentioned that the personnel we interviewed identified municipal under-resourcing for preparedness and emergency management as a major challenge for the cooperative model. Another type of resource shortage raised by the volunteers we interviewed, was the lack of financial resources among the voluntary organisations. Although there are financial support schemes, they are not sufficient

to cover all local expenditure. Simply put: in order to take part in voluntary preparedness and emergency response activities, volunteers have to spend a lot of time raising funds and carrying out maintenance tasks themselves. In addition to first aid provision, mentioned above, examples include organising raffles, making and selling baked goods and voluntary maintenance work were also mentioned by our interviewees. Volunteers from every part of the local branch contribute - but it is primarily the Search and Rescue Corps volunteers who provide first aid at events, take on driving assignments for regional health authorities, and conduct voluntary maintenance work on their equipment. Some aspects of this work are perceived as being part of the volunteer's duties, but the volunteers we interviewed explained that when too many of their duties are not directly related to the core humanitarian activity, it affects their motivation negatively.

Volunteers in the rescue service play an important role in the local preparedness and emergency response apparatus through their expertise, their knowledge, and the hours they put into preparedness planning emergency responses. From the interviews, we can see that volunteers have local knowledge of the terrain, weather patterns, the use of local resources and the how to choose the best routes and equipment to use when an incident occurs. The volunteers urge the government agencies involved in preparedness and emergency management to make use of this local knowledge.

With an increase in the volume of unwanted incidents and, possibly, longer travelling distances to incidents for the emergency services, local search and rescue capacity and knowledge will become even more important in saving lives and health in the future. Maintaining and strengthening the Search and Rescue Corps and the elected Red Cross officer apparatus which facilitates its work is now, and will remain, an important measure in safeguarding local preparedness and response capacity in Norwegian communities.

In the questionnaire put to the Red Cross volunteers, the respondents were asked to decide how strongly they agreed or disagreed with the following statement: "We practise as much as needed for rescue operations with the police, other agencies and other organisations". No fewer than 54 per cent responded that they strongly or moderately disagree with this statement. Just 21 per cent moderately or strongly agreed with this statement.



9. The Future of Volunteers in Disaster Preparedness and Emergency Response – conclusions and recommendations to Norwegian authorities

The voluntary disaster preparedness organisations are a pivotal part of the Norwegian preparedness system, playing a key role in ensuring that local communities are safe, inclusive and sustainable. The excellent collaboration between the public sector and the voluntary organisations form a solid base for the enhancing local preparedness further. Because it is definitely needed – as in the future, voluntary disaster preparedness will face many challenges:

- a likely and significant increase in the number of simultaneous unwanted incidents as a result of man-made climate change, societal changes and greater technological vulnerability
- a larger volume of incidents with a disproportionately severe effect on people living with existing socio-economic or health-related vulnerabilities
- that municipalities lack the capacity and resources to step up their preparedness and emergency management capacity to keep pace with the changing risk landscape, including lack of capacity to establish and maintain meaningful and close contact with the voluntary disaster preparedness organisations
- the risk of a decrease in the number of people who want and have the capacity to contribute to local preparedness and emergencyresponse duties – including the organisational foundations (e.g. recruitment, administrative duties) – as a result of rural to urban migration, an ageing population and changes in the way people prefer to volunteerthe risk

of overloading the most highly motivated volunteers, who will likely be asked to support resource mobilisation and maintenance work while at the same being mobilised for incident response more frequently

In light of these issues, the Norwegian Red Cross is concerned that our society will be facing increasing levels of risks that require preparedness and emergency management with inadequate local capacities. The Red Cross is therefore of the opinion that the Norwegian government should:



Prioritise risk reduction and climate action.

The Norwegian government should contribute to minimizing future risk by immediately investing more heavily in risk mitigation measures, including local climate adaptation. Comprehensive risk reduction can help limit the scope and impact of unwanted incidents and crises in the future. The most important measure that can be implemented today to reduce risks and the need for future preparedness investments is to reduce Norwegian greenhouse gas emissions and help to stop global warming and its most extreme impacts. Prioritising support from the National Budget for climate adaptation, land-use planning, the health and care sector and research will also help to limit future risks and protect the sustainability of the Norwegian economy from catastrophic loss and damage.

Ensure that vulnerable groups are given more consideration in disaster and emergency preparedness.

The Norwegian government should place greater emphasis on ensuring that local preparedness planning addresses the safety and health of groups with heightened vulnerability. The COVID-19 pandemic showed, in a brutal way, the inequity of disasters, and how age, health, life situation and background can affect their impact on individuals. In the years to come, the age composition of the Norwegian population will change considerably, and there will be an increasing number of elderly people. This will lead to an increase in the number of people, particularly in rural areas, who are reliant on uninterrupted municipal assistance and health services during unwanted incidents. At the same time, man-made climate change is expected to increase



the risk of extreme precipitation, heat waves and the spread of water- and insect-borne diseases. These are health hazards to which fragile elderly people, people with chronic conditions and the very youngest children are particularly vulnerable. To ensure safe and inclusive local communities, the Norwegian preparedness apparatus must give greater consideration to, and prepare for, events which impact on the most vulnerable groups – and include these people in disaster preparedness processes.

Improve conditions for the voluntary disaster preparedness organisations.

The Norwegian authorities should help improve the conditions for the voluntary disaster preparedness organisations. Disaster preparedness and emergency management stakeholders across the voluntary and public sectors expect their workload to increase, and point out that the current level of capacity will not necessarily be adequate. In order to face the challenges of the future, it will be necessary to scale up preparedness and emergency response capacity in both government agencies and the voluntary disaster preparedness organisations. For the voluntary organisations to be able to recruit, mobilise and maintain the motivation of more volunteers, it is necessary to ensure that their capacity is not worn down due to having to fundraise and or perform maintenance tasks. There is a need for long-term stability in the public funding allocations that enable voluntary organisations to help build and maintain local disaster and emergency preparedness. In addition, a considerable boost will be needed to secure adequate base resourcing of the voluntary disaster preparedness organisations, so that the volunteers can be freed up to pursue they duties that they are best suited and most motivated for: helping people in need.

Strengthen municipal preparedness planning and emergency management capacity.

The Norwegian government should make the establishment of municipal emergency management councils mandatory, and ensure that the municipalities have the resources they need to prevent and respond to more frequent and more

challenging incidents and crises in the future. The risk landscape of the future will require more from the municipalities, many of which are already struggling to fulfil their preparedness duties. Having enough employees with the necessary expertise and assigned responsibility for preparedness and emergency management is vital to ensure the efficient utilisation of the collective preparedness emergency management resources within the municipality. There is a need to clarify expectations and establish procedures for collaboration between the organisations and municipalities. More joint simulation exercises and the establishment municipal emergency management councils could help to promote closer collaboration, with higher levels of trust.

Ensure effective use of technology.

The Norwegian government should take a leading role in developing technology to assist search, rescue and emergency response, and in making this technology available to all relevant stakeholders. This includes the implementation of measures to reduce technological vulnerability. Effective, coordinated technological systems for the whole collective of Norwegian preparedness and emergency management stakeholders will facilitate more efficient responses as the pressure in the face of increasing pressure. Measures such as the Joint resource register and the Joint operations support system aim to make it easier for the emergency response stakeholders to work together efficiently during search and rescue operations. Continuing investment in up to date, interlinked systems will make it easier to allocate resources appropriately in the event of simultaneous incidents, and to improve response capacity in rural areas with high outward migration rates and/or an ageing population. At the same time, the optimal utilisation of technological innovations also brings with it greater technological vulnerability. This vulnerability must be addressed in preparedness and contingency plans.

10. The road ahead and recommendations for decision-makers in the Red Cross

In the years to come, demographic changes and changes in the way people volunteer will affect the basic conditions for sustainable local preparedness and emergency management capacity. At the same time, voluntary disaster preparedness organisations must scale up their capacity to be prepared for the increasing risks they will face in the future.

It is the duty of the Red Cross to provide assistance in the event of accidents and incidents affecting individuals, families, local communities - or even the whole country. If the Norwegian Red Cross is to maintain its robust contribution as a voluntary disaster preparedness organisation, we will need to continually adapt and collaborate with public authorities and other actors in order to prevent and respond to acute physical and-psychosocial needs.

Based on the research findings, it is therefore recommended that the Norwegian Red Cross:

 actively work - particularly in small and medium-sized municipalities - to recruit volunteers for search and rescue operations and other disaster preparedness tasks, and ensures that everyone who is suitable and wishes to volunteer is able to quickly enrol and start contributing to their chosen activity.

- maintain competency levels among Red Crossvolunteers, particularly those that contribute in specialised roles such as search and rescue. However, the organisation should also assess whether facilitating short-term volunteering would be an effective way of rapidly mobilising more people for basic tasks during major incidents.
- prioritise participation in arenas wherecollaboration with other disaster preparedness and emergency response organisations can be strengthened, including predictable and regular participation on county preparedness councils, and taking the initiative to arrange joint exercises at all levels.
- ensure that the Norwegian Red Cross develops and maintains the tools and professional support its units need to establish and maintain a good, collaborative preparedness collaborations with the municipalities.
- invest in training and tools which ensure high-quality volunteer contributions to managing the changing risk landscape, including duties related to the impacts of climate change.

be a proactive and knowledgeable participant in the development of new technological tools for coordination of public and voluntary sector resources before, during and after unwanted incidents.

Method and underlying data

The project titled *The Future of Volunteers in* Disaster Preparedness and Emergency Response draws on a number of original data sets which were collected during the period spring 2020 to spring 2022. We also drew on interviews with preparedness and emergency management stakeholders within the police from a previous project on voluntary emergency response (Skiple and Winsvold, 2020).

The data collected between spring 2020 and spring 2022 include:

1. A digital questionnaire survey was distributed to Red Cross volunteers who have actively contributed to the organisation's disaster preparedness and emergency response work in the past 12 months. These are referred to as disaster preparedness and emergency response volunteers in this report and include as those who have taken part in voluntary work relating to search and rescue, evacuation, municipal or county Emergency Council, pandemic response and/or other responses in connection with extraordinary/unwanted incidents. This survey formed part of the 2021 Red Cross Volunteer Survey (Red Cross, 2022a), which was distributed to all Red Cross volunteers in October 2021. Looking at search and rescue volunteers in particular, the response rate was 29 per cent.

- 2. A digital questionnaire survey distributed to all Red Cross local branch presidents and local Red Cross Search and Rescue Corps leaders was carried out in March and April 2022. This is referred to as the "leader survey" in this report and had a response rate of 32 per cent.
- 3. An interview-based survey conducted by a partnering research project, entitled Voluntary organisations in local emergency planning (Frivillige organisasjoner i lokal beredskap or VOLEM). This included interviews with representatives of with voluntary disaster preparedness organisations (including the Red Cross) and government agencies (the police and municipal and county preparedness and emergency management units) in six municipalities across three police districts in 2020 and 2021. The municipalities were chosen to provide the greatest possible diversity in municipality size and risk of incidents which could trigger different types of emergency response. The voluntary disaster preparedness organisations interviewed as part of this survey included the Norwegian Red Cross, Norske Alpine Redningsgrupper (Norwegian Alpine Rescue Groups), the Norwegian Women's Public Health Association, the Norwegian People's Aid, Norske Redningshunder (Norwegian Rescue Dogs), the Norwegian Radio Relay League and Speidernes beredskapsgruppe (the Norwegian Guide and Scout Association's emergency group).

- 4. An interview-based survey of preparedness and emergency managers within the county governor apparatus and the police conducted in spring 2022.
- 5. An interview-based survey with respondents from the Red Cross at national and district levels was conducted in spring 2022. As part of this, we interviewed both Red Cross employees in leading or key positions as well as elected officers at the organisation's national and district levels. In consultation with the project's reference group, three counties were chosen for interviews Hordaland, Trøndelag and Viken (Akershus, Buskerud and Østfold) to ensure a broad geographic and demographic variation.

As part of the project, we have looked in detail at a sample of seven risk areas and nine scenarios covered by the Directorate for Civil Protection's report Analyses of crisis scenarios (Analyser av krisescenarioer, DSB, 2019). The sample satisfies three criteria: 1) These are among the most likely according to DSB's analyses, 2) they are of particular relevance to the Red Cross and other Norwegian voluntary organisations due to the potential for volunteer mobilisation, and 3) there is variation in the scenarios, so that our volunteer preparedness for future risks is as competent as possible.

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