Problem solving networks in the Nordic Fire and Rescue Service

How are the operations of the Fire- and Rescue Services effected by the formal and informal problem solving networks? Will these networks act as expected during an incident?

The project FIRE21 examines formal and informal problem solving networks (PSN) within the Fire and Rescue Services (FRS) in the Nordic countries. The project is financed by Nordforsk and is a cooperation between researchers in Sweden, Norway and Denmark.

The objective of the research
The objective of the research in FIRE21 is to pave the way for an effective FRS in the future. The research will clarify similarities and differences between formal and informal PSN and which abilities best support the FRS in the future. An important outcome is to identify crucial resources for effective problem solving.

To understand problem solving networks
The second work package in FIRE21 is called Benchmarking Network Based Problem-Solving in the FRS. The aim is to understand the PSN and associated capabilities in Norway, Sweden and Denmark. To fully understand this, a mapping of the problem-solving structure from national to local level will be conducted.

Initial study, interviews and case studies
An initial study of the legal framework and regulatory documents for the FRS offers knowledge about the existing formal structures – the 'map'. This is to be complemented with interviews and case studies on a local level to understand how problem solving is carried out in practice – 'the terrain'.

Webinar as part of the research
To gain further insights, FIRE21 arranged a webinar 18th of August with delegates from each of the three countries' directorates:

- Myndigheten för samhällsskydd och beredskap (MSB), Sweden
- DEMA/Beredskabsstyrelsen, Denmark
- Direktoratet for samfunnssikkerhet og beredskap (DSB), Norway.
Several topics on the webinar
The webinar covered topics such as tasks and roles within the directorate, formal organizations, significant stakeholders and collaborations. The seminar showed that there are more similarities than differences between Sweden, Denmark and Norway at the national level.

Many similarities in the Nordic countries
A common challenge faced by the directorates is their lack of formal authority, given the autonomy of local governments in each country. Despite working closely and cooperating well with the local FRSs, the directorates do not typically issue orders. Although some codes and regulations derived directly from national laws may be mandated, the national authorities typically provide advice and support rather than orders. This can sometimes lead to inefficient problem-solving during large and complex incidents where there is a need to regulate cooperation between the national and the local level.

Small and large municipalities differ
The FRS within each country differs in terms of capacities, demography, and local challenges. One similarity is that FRSs in large municipalities are often relatively self-sufficient, whereas FRSs in smaller municipalities need more national support.

One difference originates from geography
One obvious difference between the countries originates from their respective geographies. An example of this is that the directorates in Sweden and Norway have gained more experience, competency and responsibility managing forest fires. Denmark, however, has previously dealt with several floods and is therefore more involved and experienced in handling coastal and fluvial flooding and dams.

Some identified challenges
To conclude, there are more similarities than differences between the three countries’ directorates when it comes to both formal structures and how they carry out their mandate. Challenges relate to the command structure, size of municipality and the various types of incidents. These are some of the insights to be taken further to the continued research in FIRE21.

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