

Hovedtema:

"Security and energy: role of the state territorial representative towards the citizen"

Innleggstema:

"Risk management of blackout due to difficult weather including extreme winter conditions"

Foil 1: Tittelen på innlegget

Innledende formuleringer ut fra "normalen" på slike samlinger

Foil 2: Norgeskart med Telemark uthevet

Initially I would like to give a short introduction to Telemark. Telemark is one of 18 regions in Norway, located in the south-eastern part of the country. The region has a total of 171.000 inhabitants and covers 15.300 square kilometres.

Foil 3: Telemarkskart med kommunene

We have 18 local municipalities, varying in size from 53.000 to 1.300 inhabitants, and 10 of the municipalities have less than 5.000 inhabitants.

Foil 4: Norgeskart (tegning) med «vindguder»

Weather systems with strong winds and heavy precipitation are predominantly coming from the west and thus mostly affecting the coastal regions in the western, central and northern part of the country, while Telemark and the rest of the south-eastern part of the country is receiving good protection from the mountain ranges.

Foil 5: Kraftlinje som har kollapset (420 kV Kvilldal-Rjukan)

Although we are not the most exposed region in Norway, of course we still face problems. The picture you see here is from this winter, when two of the masts of one of the regional power lines towards the city of Rjukan, in our northernmost municipality, collapsed.

Foil 6: Tegning med nedisede strømledninger

Foil 7: Nedisede strømledninger på Voss I 1961

Predicted climate changes, with stronger winds, more lightning strikes and especially more intense precipitation and warmer winter temperatures, which increases the chance of icing on the cables of the power grids, will increase our exposure and vulnerability.

Foil 8: Kart som viser nettselskapene i Telemark



The power grid in Norway consists of three different levels:

- The national power grid (300 and 420 kV) which is also connected to our neigbouring countries for import and export of power.
- The regional power grids (132 and 66 kV) which transports electric power from the national power grid to the local power grids.
- The local powers grids (400 and 230 V) that distribute the electric power to end consumers

The map you see here shows the different local power grids in Telemark. In total there are 10, each with different ownerships. Mostly the local power grids are owned by local municipalities and/or Statnett, i.e. the Government.

Foil 9: Kraftforsyningens beredskapsorganisasjon

To cope with this complex ownership structure, and be able to coordinate and prioritize efforts in crisis situations, a national emergency organization for the power supply has been set up, which includes regional representatives. I will address our work with them later on in this intervention.

Foil 10: Fylkes-ROS

The document you see here is one of our responses to the task of establishing an overview of the risks and vulnerabilities of the region. It is produced and updated through a combined effort of all the key responsible agencies and companies working within the region, which are all represented in the Regional Resilience and Emergency Preparedness Counsil, which is chaired by the State Territorial Representative.

Foil 11: Handlingsplanen til Fylkes-ROS

This document is one of our responses to the task of coordinating regional efforts to increase resilience and emergency preparedness. It outlines and prioritizes the common regional efforts for the next period, which is normally four years, but the document is annually revised.

Foil 12: Kommunevåpnene

Coordinating national requirements and expectations for the safety and emergency preparedness work of the municipalities, and supporting them in this work is defined to be our primary task, as the basis for overcoming most emergencies is having local communities that have prepared themselves and are resilient when facing challenges during a crisis.

The way we do this is:



- Inspections of the municipalities pursuant to the law from 2010 regarding municipal emergency preparedness, civil protection and civil defense.
- Conducting emergency preparedness exercises with subsequent performance evaluations for the leadership and support staff of the municipalities .
- Initiating courses, training and seminars within the scope of resilience building and emergency management and making arenas for the municipalities to coordinate with the relevant regional and local agencies, like the power supply companies.

Foil 13: Fylkesmannens rolle ved strømbrudd

The State Territorial Representative is not supposed to be directly involved in the handling of the crisis, but leave it to those normally responsible, .i.e for example the power supply companies and the municipalities, to handle repair work and emergency measures themselves, until they request our support or we deem it necessary to take a coordinating role. Until we assume such a coordinating role our function is to monitor and report.

Foil 14: Strømbruddet i Steigen – kommunehuset uten strøm

This is the municipality building of Steigen, which during the winter of 2007 suffered a 6-day period without electric power.

Our role before the black-out would be to make sure that the municipality either has a backup power supply or plans for an alternative location to operate from if necessary. During the black-out we would support the municipality as requested, and monitor that adequate health care and social services are supplied to the citizens.

Foil 15: Strømbruddet i Steigen – drivstoffpumper trenger drivstoff

During a black-out fuel pumps do not function. Our job is to challenge those who need fuel for generators, businesses and public functions alike, to make sure that a back-up system for fuel supply is in place when needed.

Foil 16: Strømbruddet i Steigen – mye avansert utstyr som krever strøm

During a black-out old a lot of the equipment we rely on in our day-to-day lives will not function. This picture is from a dairy farm, where the milking equipment is totally dependent on a functioning power supply.

Our job is to make sure that planning for a black-out is done wherever this is needed, and instill an understanding in our citizens that a black-out, although we hardly experience this at all - is an event that has to be planned for, and that one cannot rely on public services to supply back-up solutions, but that everyone fundamentally has an individual responsibility as well.