



The impact of implementing CAP (Common Alerting Protocol) for issuing weather warnings

Solfrid Agersten (1) and Gjermund Mamen Haugen (2)

(1) Norwegian Meteorological Institute, Oslo, Norway (solfrid.agersten@met.no), (2) Norwegian Meteorological Institute, Tromsø, Norway (gjermund.mamen.haugen@met.no)

The Common Alerting Protocol (CAP) is a simple but general format for exchanging all-hazard emergency alerts and public warnings over all kinds of networks. Implementation of CAP by official alerting authorities is promoted by the International Telecommunication Union (ITU) and the World Meteorological Organization (WMO), among many other international organizations and agencies.

Norwegian Meteorological Institute has implemented CAP in the production chain when issuing a weather alert of a certain severity. This is a general approach that will open up for better interoperability in Norway and across country borders. The presentation will give an overview of the implementation when forecasting warnings of different kind of meteorological phenomena that could cause damage.

The implementation forces us to forecast consequences of the moderate, severe and extreme events. The CAP format gives also possibilities to communicate important messages during normal weather situations, and also warn about less certain weather outcomes that could be valuable for users to be prepared for.

During the last years MET Norway had close co-operation with the Norwegian Water Resources and Energy Directorate and the Norwegian Broadcasting Corporation in implementing CAP. We have developed a common interpretation for the fields in the alert format: time, geography, severity, certainty, geography, instructions, consequences and so on. In Norway it is also challenges due to a complex ocean-land mask since the weather types cause different consequences over the sea than over land. This challenge do we also have for mountainous areas, when the weather often is worse above or below a certain height.

Using the CAP-format gives also challenges and possibilities in the way of communicating weather warnings to the society. A weather system is valid for a larger area, but people nowadays want a weather forecast for their place; home, cabin or city. We will show how MET Norway's public website Yr (yr.no) displays CAP weather hazard warnings, and how we communicate the warning message to some stakeholders. The implementation also gives some impacts in how the meteorologists work when issuing a weather warning, and we will tell about lessons learned during the process.