

## **Methods for avalanche protection on roads in Finnmark in Northern Norway**

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### **ABSTRACT**

The Northern Norwegian road network often connects remote communities to central parts of the country through avalanche alpine landscape. These communities are often vulnerable to isolation due to avalanche hazard on the road and no detour possibilities. These are mostly low-traffic roads with important transportation such as fresh fish for the European market.

In order to reduce road closures and increase safety for road users due to avalanche hazard in a cost effective approach on low traffic roads, the Norwegian Public Road Administration (NPRA) utilize different methods. The avalanche protection methods are under continuous improvement inspired by new technology and projects from other parts of “the avalanche world”. The presentation will show the planning and choice of methods in some projects with avalanche protection in Finnmark County, the northernmost part of Norway at about 71 degrees north.

We will also present some experiences with the use of active avalanche control through the last winter seasons. Conditions are often challenging due to extreme arctic climate and lack of daylight during midwinter.