The Norwegian Public Road Administration selected Norphonic VoIP Emergency Roadside Telephones for the new European road E18 between Kristiansand and Grimstad in Norway.

The road construction project, covering over 345 kilometers, is the largest project ever completed in the South of Norway. It took 38 months to complete and employed people from over 20 nations in the process.

The road system, which features 4 bridges and 7 tunnels, is built to very strict safety standards and the technology employed also needed to be esthetically pleasing to look at.

After an in-depth review of possible Emergency Telephone solutions, the Norphonic Heavy Duty VoIP Telephone was deemed the best Emergency Roadside Telephone (ERT) product due to its high performance capabilities, robustness and innovative product design.

**Installation Summary**

Norphonic VoIP Emergency
Roadside Telephones (ERT)

**Location**
Norwegian E18 Road between Kristiansand and Grimstad

**Customer**
Vegvesenet (Norwegian Public Road Administration)

**Industry**
Road Security, Emergency Roadside Telephones
The Solution
In their tender, the Norwegian Public Road Administration put emphasis on that the system needed to be easy to install, operate and maintain. The Norphonic ERT solution fitted the bill perfectly, with easy remote configuration, unattended updates of firmware and automatic health-check and fault sensing functionality.

Another key criteria was that that the solution had to be able to perform in extremely challenging areas, exposed to dust, vibration and extreme weather.

Says Thomas Lyngtun Hansen, Technical Director at Norphonic "funnily enough, even in Norway, the problem with the weather is not really the cold, but the heat. You will be surprised how hot it can be inside a SOS call box where the sun is shining in the summer months. Often it can get as hot as +50 degrees in the box during the day only for the temperature to drop drastically overnight."

"In such environments it is important that the technology not only can handle hot temperatures, but also that the system is condensation proof, preventing the formation of water inside the unit. This could otherwise affect performance."

The Results
The Norphonic Heavy Duty VoIP-SIP telephone is a fully IP enabled telephone which means that the Norwegian Public Road Administration now can realise the full benefits of converging the telephone onto their data networks. This includes immediate alerts of events such as hookswitch, microphone and loop integrity failure, HTML based remote configuration, unattended updates of firmware and configuration.

With only one voice and data infrastructure to install and maintain, the Norwegian Public Road Administration was also able to save considerable time and money in the installation process. The system is easier to maintain and the call costs are significantly lower than with comparable analogue systems.

Helge Rognstad, Global Sales and Marketing Director at Norphonic concludes: "We are pleased that our product provides a reliable operation in this very challenging area, and look forward to install our Norphonic Heavy Duty VoIP telephones in other road construction projects in the future"