

## IMPROVED COORDINATION AND COMMUNICATION FOR NORWAY'S EMERGENCY MEDICAL SERVICES

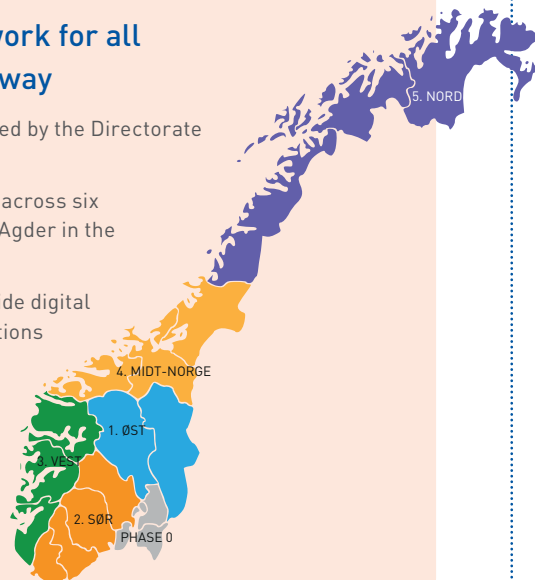
Three Cs are driving positive change at Norway's regional AMK emergency medical communication centres: better coordination, clearer communication and enhanced collaboration. It's all made possible by the new national Nødnett digital TETRA network and the Frequentis ICCS 3020 communication system.

This state-of-the-art infrastructure improves resource management, lifts audio quality and enables cross-service talk groups. It opens "...a whole new world of opportunity", says Hilde Fredriksen Rikheim, Deputy Leader of the AMK Vestre Viken Emergency Medical Communication Centre. Continuing system development is spreading Nødnett's benefits to other parts of Norway's health system, too.

### WHAT IS NØDNETT?

#### A secure, digital radio network for all emergency services in Norway

- Complex, 6+ billion NOK project led by the Directorate for Emergency Communication
- Nationwide roll-out (2011 – 2015) across six geographical regions, from Vest-Agder in the South to Finnmark in the North
- Delivery & operation of a nationwide digital TETRA network by Motorola Solutions and some 40,000 TETRA radios by various suppliers
- Delivery of about 800 control centre working positions by Frequentis, based on the company's ICCS 3020 communication system



### CUSTOMER PROFILE

Norwegian Directorate of Health  
<http://helsedirektoratet.no/>

Directorate for Emergency  
Communication  
<http://www.dinkom.no>

### BUSINESS SITUATION

Norway's Directorate for Emergency Communication (DNK) is charged with development and operation of the new Nødnett digital TETRA radio network for the emergency services. Within the project, the Norwegian Directorate of Health wanted flexible, Nødnett-enabled control centre solutions that could adapt to the huge variety in the country's emergency medical services infrastructure.

### SOLUTIONS

Frequentis worked with DNK and the Directorate of Health to develop a custom specification of its ICCS 3020 communication platform for Norway's emergency medical communication centres, plus a separate virtual implementation to support remote operator positions.

### IMPACT

- **Improved coordination and resource management:** seamless communication between ambulance staff and control centres.
- **Enhanced multi-agency collaboration:** swift sharing of information with police and fire and rescue services.
- **Better sound quality:** clearer communication when lives are at stake.
- **Operational flexibility:** remote operator positions offer control centre functionality to a wider range of health resources.

**"It's one screen, one headset – easy to use and easy to learn."**

Hilde Fredriksen Rikheim, Deputy Leader of the AMK Vestre Viken Emergency Medical Communication Centre

# TALKING TO THE RIGHT PEOPLE - FASTER - FOR BETTER EMERGENCY RESPONSES

## FLEXIBILITY HELPS SAVE LIVES

Norway's ground-breaking national Nødnett project – managed by the Directorate for Emergency Communication (DNK) – involves the creation of a nationwide digital TETRA network for use by all emergency services, complemented by new communication systems for the relevant control centres.

Medical facilities in Norway are run by local authorities, with organisational differences between each region's emergency and on-call medical services. This complexity and an eclectic mix of users makes implementing new communication solutions a real challenge.

To meet this challenge within Nødnett, DNK asked Frequentis to equip the main regional 113 AMK emergency medical communication centres with a customised version of the company's ICCS 3020 communication solution.

## ENHANCED CROSS-AGENCY COLLABORATION

The new Frequentis systems give these centres easy access to all Nødnett benefits, like clearer audio and advanced resource management, helping ensure more efficient emergency responses.

Flexible talk groups are critical in this context. For example, explains Hilde Fredriksen Rikheim, Deputy Leader of the AMK Vestre Viken Emergency Medical Communication Centre, "Ambulances from different regions can communicate with each other via a talk group."

Even more importantly, talk groups can include other emergency services. Rikheim notes, "We can get information from the police or fire and rescue services, and prepare an ambulance for arrival at an incident. Before, communication really only happened when everyone was already at the scene."

The success of the talk group concept means emergency medical communication centres are now looking to expand the capacity even further.

## SPREADING THE BENEFITS

Staff at the centres have taken readily to the new Frequentis system. "It's easy to learn and use, and the layout is easy to understand", says Rikheim.



Photo: Vizpro.no

## KEY FEATURES OF THE FREQUENTIS ICCS 3020 SOLUTION:

### General features:

- Scalability, resilience and centralised maintenance
- Rich telephony and radio talk groups functionality
- Messaging services (SMS, SDS, email)
- Radio GPS positioning
- Full utilisation of Nødnett TETRA voice and data services

### Health service implementation:

- Advanced resource management across multiple control centres
- Integration with health service CAD / GIS systems
- Centralised system concept with dispersed working positions ("virtual control rooms") for small, local control centres

Frequentis, DNK and the Norwegian Directorate of Health (Hdir) are now looking at ways to ensure other healthcare staff can make the most of the new TETRA functionality. One option might be to introduce more systematic training for radio users.

Virtualisation is already expanding sophisticated control room functionality to smaller control rooms (such as the new General Practitioner on Call - GPoC - 116117 call centres and AEDs), independently of the main AMK emergency medical communication centres. So a user in, for example, a hospital can get remote, IP-based access to TETRA voice and data services at a central ICCS 3020, but with minimal local hardware requirements. It's another example of how flexible control centre solutions can make a real difference to public safety.

**"Staff are very happy with the benefits of moving away from a phone solution."**

Hilde Fredriksen Rikheim

## FREQUENTIS AG HEADQUARTERS

Innovationsstraße 1, 1100 Vienna, Austria  
Tel: +43/1/811 50-0, Fax: +43/1/811 50-5009  
www.frequentis.com

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