



Kolding
Kommune

TETRA radio network SINE in Denmark

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What is SINE?

- SINE (Safety Network) is a digital radio communication system used by emergency services dealing with public order, safety and health.
- SINE is to secure the foundation of a stronger co-operation and co-ordination between the police, the fire brigades, the ambulance services and parts of the Danish Defence in Denmark.



The implementation of SINE

2006	The Danish government decides to establish a digital communications system based on TETRA
2007	The government signs a contract for the infrastructure
2008	The government signs a contract for control room software
2009	Emergency services test the network and the radios without having control rooms
2010	The control room software is delayed and the government settles
2011	New process in order to analyze the needs of the emergency services
???	New tender for control room services

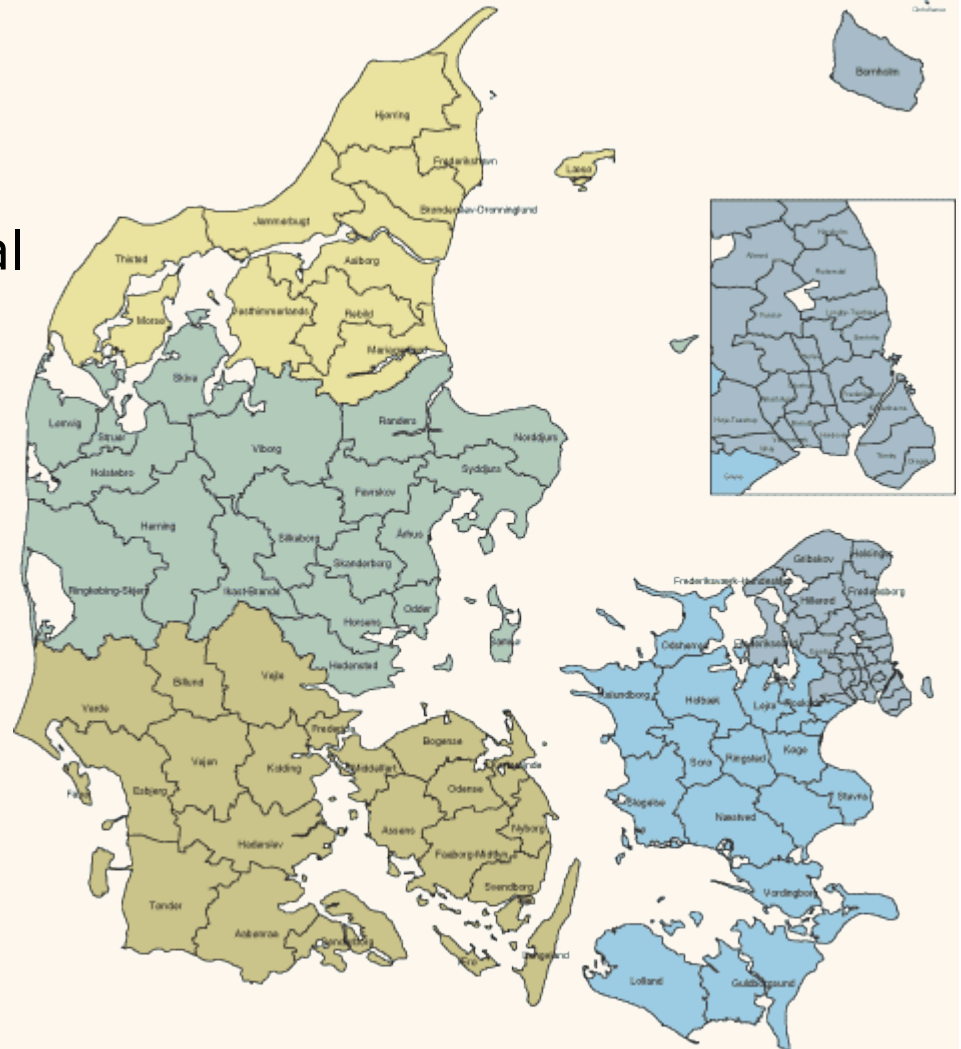
Who are the users?

- The Police
- The Fire Brigades
- The Ambulance Services
- The Danish Home Guard
- The Danish Maritime Safety Administration
- The Danish Emergency Management Agency
- Private companies which offer an emergency service for a public authority



5 regions

- The regions have the main responsibility for the provision of hospital services and the ambulance service
- 1 staffed control room in each region



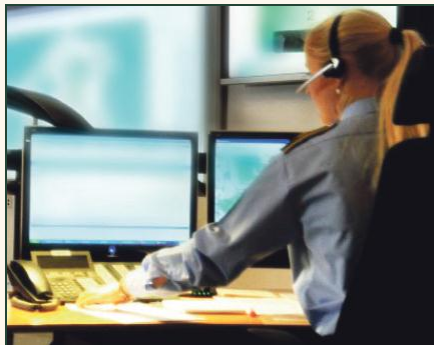
98 municipalities

- In charge of the fire services
- Only some fire brigades have staffed control rooms
- Those fire brigades or the private emergency company Falck provide control room services to some other fire brigades



12 police districts

- 1 staffed control room in each district



3 Public Safety Answering Points

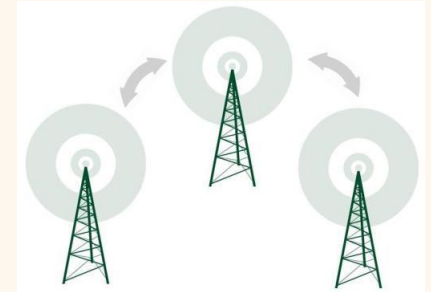
- The Danish National Police operates 2 PSAPs:
 - Aarhus
 - Slagelse
- The Copenhagen Fire Brigade operates 1 PSAP



SINE

1. TETRA network

- Dansk Beredskabskommunikation



2. Control rooms

- IHM, IBS, Intergraph, Frequentis, Terma



3. Terminals

- Motorola, Sepura, EADS/Cassidian



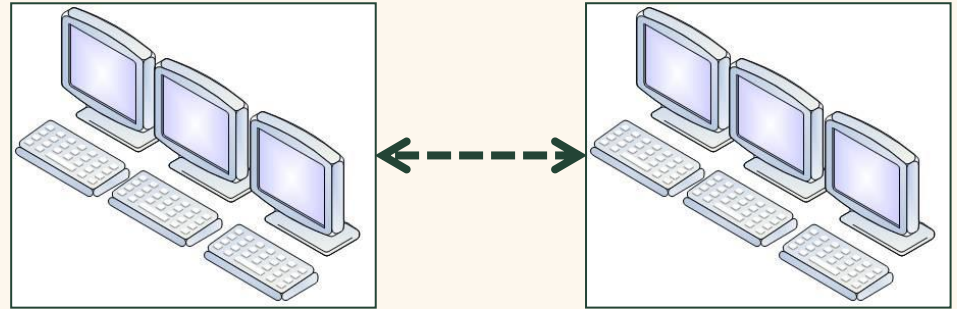
The benefits of TETRA network

- Infrastructure financed by the government
- Radio antennas secure full geographic coverage, which means that there is outdoor coverage in all of Denmark and indoor coverage in the biggest cities
- Further coverage (some bridges, tunnels and the metro in the capital, Copenhagen)
- The SINE radio network is secured from:
 - conversations being bugged and
 - communication being distorted.



The benefits of new control rooms

- Back-up between control rooms



- Improved mission critical communications
- Inter-agency communications



The benefits of new control rooms

- Real-time positioning of resources shown on interactive digital map
- Transmitting predefined information from the terminals to the control rooms updating availability status
- Voice recording and incident activity logs
- Historical and local search capabilities for analyzing resource usage and future planning
- Interfaces to third-party solutions that support fire station alerting, paging and fire records management



Control rooms in the future?

- Common operating picture that ensures right information for urgent decisions and co-ordination of incident management
- The Fire Brigades might reduce the number of control rooms and co-operate more than today
- Co-location of emergency service control rooms in order to optimize inter-agency co-operation and field operations



The benefits of new terminals

- More than 20.000 terminals ordered
- Improved mission critical communications
- Superior sound and voice quality
- Positive experiences during the entire process
- Compelling customer service portfolio with training program, a customer helpdesk and software management system



Contact details

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