



DNU - Det Nye Universitetshospital (today named Aarhus University Hospital)

DNU - Det Nye Universitetshospital Denmark's fibre-based hospital of the future!

The New University Hospital in Aarhus, the largest hospital project in the history of Denmark, selects Aginode FTTO Switches for its IT-infrastructure to meet the future demands of technology, treatments and ways of working. The Central Denmark Region has awarded Aginode a multi-year frame agreement for the delivery of 10.000 Ethernet FTTO Switches. These access switches are the key component in an innovative fibre based Local Area Network (LAN) cabling concept called "Fibre To The Office (FTTO)".

Denmark is currently spending over five billion Euros on 14 consolidated 'super-hospitals' which will rely strongly on innovative healthcare IT. The first to be completed is the New University Hospital (DNU) Aarhus, the largest hospital project in the history of Denmark. Once completed in 2020, the hospital village will feature a wide range of state-of-the-art IT innovations which will make the IT significantly more efficient and cost-effective.



To accommodate a wide range of current and future services and applications, some 80,000 fibres will run to a vast number of Aginode FTTO Switches across the campus. The new network opens up all sorts of new possibilities, such as PACS (picture archiving and communication systems) data storage, transfer and analysis, Electronic Patient Record, video surveillance with high definition cameras, Clinical and Service Logistics as well as building management solutions, such as security, alarms, climate, heating.



Telephony, entertainment and WiFi also run on this network. Off-site medical consultants can advise or oversee medical procedures, operations or diagnostics. Physical and electronic signage and apps will guide visitors to the right location in the shortest possible time. Each patient will use a personal monitor to find information about treatment procedures, training, menus,

entertainment and more. For the hospital, all this means more ease and efficiency at a lower cost.

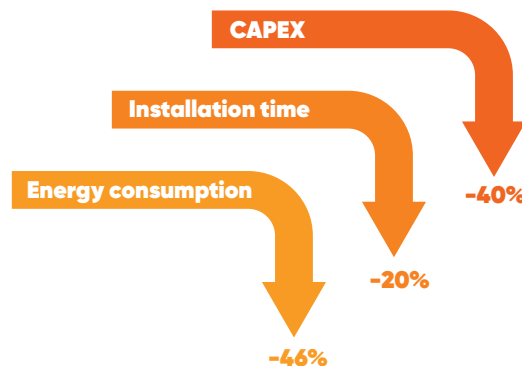


+ 10,000
FTTO switches

Two fibres run from one end of the campus, two more run from the other side. A double fibre ring with a large number of ports has been chosen for reliability and cost reasons. This makes a high bandwidth available and allows building redundancy into the wireless network so staff can check, monitor and communicate from any location. All IT infrastructure and in-building systems are located on level four, throughout all of the buildings. The system is intelligent enough to alert the IT department and prevents problems for occurring in the first place. Before something breaks down, people are aware of the danger.

Costs and Energy Savings

Besides reaching substantial cost savings, DNU has in addition ambitious sustainability targets aiming to reduce CO2 pollution as well as energy consumption, to a large extent, thanks to a green IT Network.



This project will be finished in 2020, but the concept is so flexible that the building can be reconfigured when required in order to accommodate future changing healthcare demands.

This concept makes sense as it improves the quality of care, flexibility, scalability and total cost of ownership (TCO). The only real obstacle is the mindset of the healthcare decision makers and their suppliers.

Thanks to highly pro-active suppliers, a solution could be developed which matches DNU's needs precisely. Lars Knudsen (IT project leader, Det Nye University Hospital Aarhus) concludes: "We were also happy with the easy installation, made possible by the modular approach, as well as the support provided in this large, challenging project. The new concept provides us with the best possible flexibility to design our new buildings to respond to challenging requirements of modern health care institutions – and this at an outstanding cost advantage compared to more traditional infrastructures."

Problem

- highly automated: 800 services (across treatments and processes) are running on the network
- highly flexible: an office can be changed into an operating theatre or patient room if required

Solution

- LANactive FTTO switches to the end user
- Special design ensures redundancy and high availability
- "IPv6 ready"-Switches

Benefit

- Flexibility, scalability and bandwidth
- sufficient fibre reserves for future needs
- Supports today's and tomorrow's applications, services and systems



#smartconnection



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