

Project Scope Overview	
Customer:	South Tees Hospitals NHS Trust
Site Location:	Middlesbrough
Requirements:	<ul style="list-style-type: none"> The Trust's 6,800-plus staff supply specialist health services to a population of nearly 1.5 million 5,000 Category 5E outlets across The James Cook University Hospital and Northallerton Friarage Single and Multi-mode fibre supporting Gigabit Ethernet between wiring closets and the three main communications rooms in a star network with a ring back-up across 80 communications cabinets Hewlett-Packard server cluster and Cisco 6509s at the core of the network with 3750 and 2960
Equipment:	Category 5E UTP



The length of one of the corridors at The James Cook shows the scale of the Hospital

Project Brief

Cancer therapy, neurosurgery and treatment for spinal injuries are just some of the specialist health services delivered by South Tees Hospitals NHS Trust. The organisation also provides district general hospital services to around 400,000 people via its two main hospital sites in Middlesbrough and Northallerton. Overall the Trust's 6,800-plus staff supply specialist health services to a population of nearly 1.5 million.

A multi-million pound redevelopment on The James Cook University Hospital site is one of the Government's Private Finance Initiatives (PFIs) and has developed it into one of the largest hospitals of its type in Europe. The completion of a £21 million redevelopment at the Friarage Hospital, which hosts the Ministry of Defence Hospital Unit (MDHU). Plus increased links with the universities of Teesside, Durham, and Newcastle, and a purpose-built academic centre with medical students doing their clinical placements on site, make South Tees NHS Trust a leader in medical care.

With the advent of the National Programme for IT in the NHS, technology is playing an increasingly important role in the delivery of health services. As Mick Dodgson, ICT Business/Contracts Manager for South Tees Hospitals NHS Trust, explains: "Our clinical staff rely heavily on the investment we have made in ICT and use technology to help improve communication and share medical information more efficiently."

Although only half of the Trust's employees are directly connected users, all staff can access both the internet and email through shared terminals. Access to these applications plus critical patient systems is reliant on the Trust's server and networking infrastructure. "If there is a problem with this infrastructure, then it could result in a major impact to the trust's business," adds Mick.

Project Summary

The trust had been a loyal to a major competitor for years and via the NHS PASA found qualified contractors who were asked to bid every two to three years for the installation and maintenance of data and telecom services.

In 1999 when the new James Cook University redevelopment was being designed the architect suggested Connectix Ltd as a manufacturer worth considering for a new build. The communications team decided to take a closer look. Mick commented "We were a little wary of Connectix at first as they did not have the name or history of our previous supplier but the more we studied the product and the warranty the better it got. After seeing the comprehensive testing of cable, outlets and panels we felt we could not justify paying more for any other option. Seven years on we can only thank the Connectix team for the high quality product and service they have supplied. This has given the Trust a cost effective and future proofed solution."

The network has two core sites (The James Cook and Northallerton, Friarage) although they are linked to ten other trusts / hospitals via LES 100 BT. James Cook and Friarage have a microwave 100Meg link backed up by LES 1000BT. These key sites then have a single mode and multimode star wired fibre network with a back up ring 802.1w rapid spanning tree. The 17 x 16 core links and 13 x 8 core links spread across James Cook site vary from 1500m to 30m.

During the last seven years the trust has switched contractors but with the support of Connectix Ltd training services each contractor has been able to give continuity of service.

The Friarage hospital is a 254 bedded hospital situated in Northallerton, North Yorkshire. In 2005 South Tees Hospitals NHS Trust of which Friarage hospital is part developed the case for a purpose built facility for Paediatrics, Women's Health, Pathology and Pharmacy. Interserve Health was appointed to work with the trust to deliver this vision, which was the first scheme to be awarded under the Procure21 National Roll Out. Procure21 has challenged contractors to engage expertise of supply chain members, develop mutual trust and partnership working. Projects were carried out within a live hospital environment with no disruption to clinical services. All works that involved clinical areas were planned with the full engagement and the participation in the transitional planning, ensuring changes occurred smoothly and efficiently. Connectix Category 5E cabling was used through-out.



Server cabinets in one of the communication rooms



Structured cabling dropping into the communications room

Friarage Hospital Northallerton



Case Study



South West Elevation



site prior to construction

"The Trust is delighted with the commitment and professional approach that Interserve have brought to the project. Working on a restricted site in the centre of a fully operational hospital the whole team worked together to deliver a facility that the people of Hambleton and Richmondshire fully deserve and can be proud of."

Ian Roberts, Project Manager
South Tees Hospitals NHS Trust