



case study

Cheshire and Wirral NHS Partnership



Non-line of Sight Wireless Project



About Cheshire & Wirral NHS Trust

The Trust was formed on April 1st, 2002. They employ 2,500 staff and work in close co-operation with Service Users, Carers, Cheshire and Wirral Social Services, the six Primary Care Trusts within the area, other NHS organisations as well as other statutory and voluntary agencies.

Services are provided across four localities: Central Cheshire, East Cheshire, West Cheshire and Wirral consisting of approximately 70 core sites, many of which house more than one specialty.

The Project

The Trust was looking for a solution to the problem of delivering desktop services and VoIP to a number of small teams at the furthest reaches of the Trusts region. Often based in residential areas, it was impractical and often expensive to either install or lease direct fibre connections. Even traditional Laser connections could not be deployed as there was no point to point line of sight.



David Walliker (Head of ICT) for the Trust asked INS Sudlows to look into resolving this issue. At once we were able to offer the ideal solution. The Orthogon Motorola - Gemini Lite is a Non Line of Sight point-to-point wireless System that uses a unique system of multiple beams and a highly sensitive receiver to combine the signals into a strong, single and fast connection.

This was vital for ensuring a Quality of Service with VoIP telephone running out to these sites and data connections back to the main NHS network.



case study

Cheshire and Wirral NHS Partnership



The Installation



Working closely with the manufacturer – the engineering team at INS Sudlows quickly set up the link within the day, in the middle of winter, to ensure that the NHS staffs were able to connect on to the main NHS network and deliver services to the local community.

High Speed Data Rates



Prior to this installation, the Trust were paying annual fees for Leased connections at far slower data rates of only 256K, often for up to 10 staff. With the Orthogon, even the entry level class of Gemini Lite can deliver up to 9Mbs in both directions.

Low Environmental Impact

Due to the residential location of the NHS team the need for a small physical size, point-to-point connectivity made the OS-Gemini the ideal choice. The unit will fit almost anywhere and doesn't waste power "washing" the neighbourhood with unused radio energy. The Orthogon system only uses the minimum energy needed to communicate with a single receiver.

Cost Benefits

In addition to this, the cost savings on previous leased lines over a single year have paid for the system. The added benefits to the Trust also mean that should departments have to move site, the Link can be quickly taken down and moved to another location, or even utilised as an emergency link in the event of fibre damage across a Trust site. To date the Trust has deployed four Orthogon links at various sites across the Trust area.

To Conclude

David Walliker (Head of ICT) added that:

"Delivering faster and more reliable data connections to these sites is essential for the NHS connecting for health programme. With leased lines the cost to the NHS was prohibitive. Thanks to INS Sudlows team, the system installed is not only cheaper, faster and more importantly, flexible, to the changing needs of the Trust; whilst also becoming a valuable equipment asset for the NHS."