

2007

# CISCO NETWORKERS INNOVATION AWARDS

**WINNER 2007**

Most Society Impacting Network of the Year





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Winner: Centre Hospitalier d'Arras

Project: Centre Hospitalier d'Arras new hospital

### The Company

The Hospital complex of Arras is a publicly owned establishment of health offering care in the fields of Surgery, Medicine, Obstetric Gynaecology, Psychiatry and the Geriatrics. It employs 2000 health workers and has 1200 beds.

The Hospital complex of Arras takes care of the health of a territory of 230.000 people. In 2001 Centre Hospitalier d'Arras decided to build a new hospital while keeping the existing site operational.

### The Project

Over a 4-year period the hospital introduced and deployed innovative technologies and practices. By 2007 a new state of the art hospital will be open with the technologies introduced in use operationally. The new building will allow fresh innovations to be introduced throughout the hospital benefiting all employees and patients.

The main aim of introducing the new hospital was to build a 'patient centric facility' while keeping pace with costs and medicine. Efficiency was a key business driver as the existing site experienced problems with the time nurses spent on coordination and administration.

As a result only 8 minutes per day was spent on patient care with more than 50% of nurses time spent on admin and 40% on coordination and looking for patient records. Main objectives were to give back time to health professionals, optimise resources but keep quality and improve agility and all round performance.

The project involved three key steps to ensure success; the renovation of the information system in the old hospital; the construction of a new psychiatric with 100 beds in 18 months; a new general hospital with 565 beds. All while keeping the existing hospital running without the interruption to services.

### Innovative use of Technology

The new technologies introduced are all based over IP. This includes full WiFi deployment with location based services, full security with VPN services for hospital staff as well as the town's doctors, and IP communication including more than 300x7920's and videoconferencing. All based on a high availability network – 9 x 6500, 38 x 4500.

The introduction of the new technologies has resulted in a 20% increase in activity with a similar reduction in beds. Real innovation exists in the hospital's information systems, the technology used and the new organisation and processes built around this.

### Functionality, Features, Impact.

- 10Gbps
- QoS
- High availability
- Multicast
- IP Communication and collaboration
- WiFi
- Cisco Security
- Localization services
- New full IP hospital with AGV [Automated Guided Vehicles]

Productivity has improved with the implementation of new applications such as digital recording via 7920 IP Phones. This has resulted in a 25% improvement in productivity for office staff and a reduction in average delays from 2 months to 2 or 3 days.

Entertainment and information for patients has improved dramatically with the introduction of a patient terminal in every room. This is again IP based and includes phone, TV and Video services. The system is touch screen operated and the patient enjoys office functions, email, radio and music via the Internet.

The nursing staff are more accessible to patients through the nurse call system and the technical functions in the room such as heat and light are controlled more effectively. In addition the system allows plug-ins of clinical instruments and access to online observation forms.

The implementation of these new technologies in a new building results in the delivery of improved patient care and helps the hospital attract a better quality of medical personnel. The project has given d'Arras visibility on a national and International scale and has had a real impact on its patients and on all staff.



### Scalability and replicability.

The power of the new network enables the hospital to share patient files with the 1500 health professionals in Arras. Arras is already a key reference in France and throughout Europe and the project is being replicated in several other hospitals.

### Impressing the judges.....

The judges described the winning project as 'technology truly delivering its best'. A total revamp of operational procedures resulted in a huge improvement in customer care and allowed our winner to deliver greatly enhanced services.