

SUPPORTING THE NEEDS OF THE HEALTH INDUSTRY THROUGH INNOVATIVE STANDARDS BASED SOLUTIONS

The ICT expenditure across the European Health industry is set to grow 5-fold as the industry drives to be joined up by 2015.

The European Commission has recently published a new strategy “Accelerating the development of the e-Health Market in Europe”. The strategy is designed to remove many barriers and promote interoperability in order to realise target levels of increased ICT spending by 2010.

The strategy divides the e-Health market into four main categories – (i) applications clinical information services; (ii) telemedicine and homecare; (iii) integrated regional and national health information networks and distributed electronic health records; and (iv) secondary usage non clinical systems.

In establishing its strategy the EU is fundamentally aware that the levels of ICT development across all of the member countries vary enormously. Key to the success of the e-Health project is interoperability across all member states. This includes interoperability with the USA, where e-Health is substantially more developed.

It is the perception of the EU that much has to still be delivered in terms of interoperability. Work has to begin with establishing a standard approach to the fundamental administrative and management systems including the basic support infrastructure whilst remaining mindful of the high bandwidth needs of the more demanding clinical applications. Bandwidth demands will be conditioned through the deployment of emerging technologies such as Biomedical Informatics. The success of which relies on the efficient use of vast amounts of data often from geographically disparate data bases to enable effective disease prediction, prevention and treatment.

The EU paper “ICT for Health and i2010 – Transforming the European healthcare landscape - Towards a strategy for ICT for Health” outlines the notion of a supercomputing HealthGrid. The HealthGrid represents not only access to and sharing of large distributed data sources, but also a high performance, high throughput infrastructure to support the computational power required to deliver the real benefits to the patient.

To achieve the level of interoperability required to satisfy the objectives of the e-Health strategy the EU has recognised that a high degree of standardisation is required across all software, hardware, firmware and infrastructure platforms. In addition to delivering full interoperability, solutions must be secure and reliable to deliver the Quality of Service levels demanded by what could be life saving applications.

As one of Europe’s leading cabling infrastructure providers, **Brand-Rex** is uniquely placed to support the developing needs of the EU e-Health strategy through its many innovative, standards based, optical and copper based cabling solutions and infrastructure management tools.



The value we add to any e-Health initiative is through our active participation in both CENELEC and ISO/IEC and our representation into the key application standards bodies within IEEE 802 in the USA that ensures our products remain standards compliant and capable of supporting developing applications.

Throughout the past 20 years **Brand-Rex** has built a reputation for delivering cabling solutions with added “headroom” to assure the user of a consistent high performance with the specified applications. Our reputation is no better evidenced today than within the UK Health sector where **Brand-Rex** cabling solutions continue to be specified in new and upgraded hospitals and primary care projects throughout the country.



Recognising the strategic objectives of the EU e-Health strategy, **Brand-Rex** believes that it is capable of delivering long term, sustainable value within the health market through its current product solutions. Our solutions are capable of supporting tomorrow's most demanding high speed networking applications such as 10GBASE-T (10Gigabit Ethernet over copper), and the developing optically based, 40 Gigabit and 100 Gigabit applications.

At the core of our product solutions lies our infrastructure management tool **SmartPatch**. The tool is designed to afford the network manager the reliability and security associated with cable patching in the network helping ensure the integrity of patient data is maintained at all times. The **SmartPatch** tool is founded on a SQL database which monitors the physical layer of the network and is used to provision network services to specific users as well as monitoring the physical location of IP based assets even across the Wide Area Network. Due to the way **SmartPatch** monitors and manages the end-to-end patching within the network, it also optimises switch port utilisation ensuring efficient utilisation of expensive network hardware. A proven solution, SmartPatch has been deployed in many high profile installations to manage and maintain patching records and the ongoing provision of service even when users move location.

Central to any network or "Grid" is the backbone. The backbone must be scaled properly from day one otherwise as the network evolves and grows unacceptable levels of latency will arise resulting in bottlenecks and in extreme cases network collapse. Flexibility can be added when designing the backbone infrastructure through the deployment of Air Blown Fibre (ABF) solutions wherever possible. **Blolite**, our ABF solution of microcables and single fibre elements allows for optimum flexibility across the network from the WAN through to the campus and even within the LAN. Offering a scalable solution to the networking backbone additional fibres can be added in the future by simply blowing new fibre cables into the existing deployed duct infrastructure.

For the high speed data centre and Storage Area Networks (SAN) 10 Gigabit Ethernet Technology is already being deployed to guarantee the throughput speeds required within networks. Our **10GPlus** (Class EA) copper based solution, which supports high speed networking applications such as 10GBASE-T, has been developed to operate within the most extreme of Electromagnetic Environments. This ensures that the cabling system remains relatively immune from extraneous noise that would cause interference and affect the network Quality of Service. Because of the low skew performance of **10GPlus** the cabling system is ideal for support medical applications such as high resolution scanning and imaging technologies.

For more general office applications the Brand-Rex ranges of **GigaPlus** (Class D) and **Cat6Plus** (Class E) offer industry leading cabling solutions for copper based gigabit networks.

Brand-Rex continues to underwrite the performance of its cabling solutions through its 25 year Product and Lifetime Applications Warranty that provides the user with peace of mind. Our business is determined to continue to develop bespoke solutions for the health market. We remain committed to delivering real value by working with health organisations through our pan European teams of Technical Support and Development Engineering staff. We continue to deliver reliable cabling infrastructure that will transparently support the chosen information and communications technologies, thereby delivering a better quality of medical service to the patient.

For more information on **Brand-Rex** and our solutions, visit us on:

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