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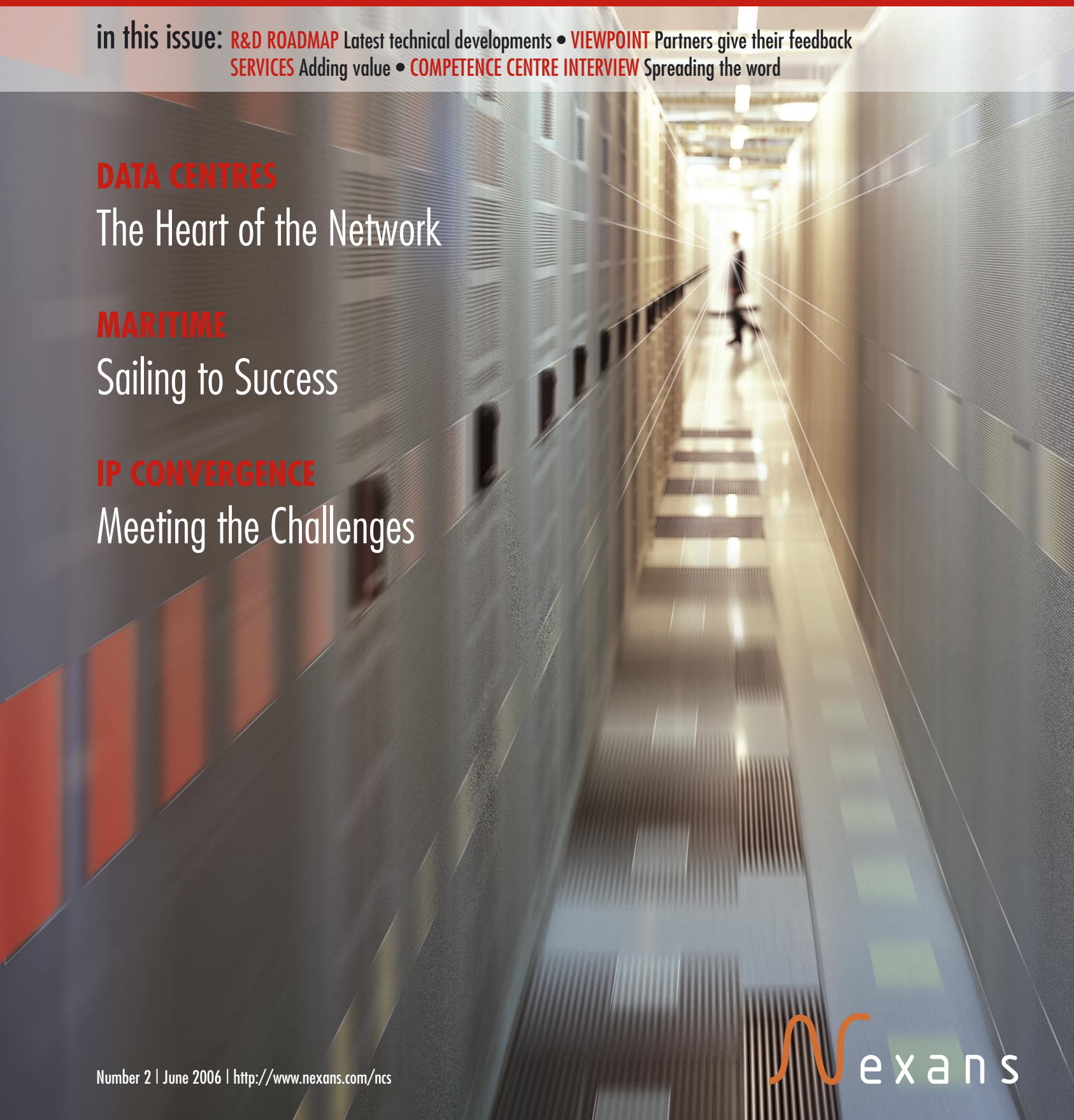
in this issue: R&D ROADMAP Latest technical developments • VIEWPOINT Partners give their feedback
SERVICES Adding value • COMPETENCE CENTRE INTERVIEW Spreading the word



DATA CENTRES
The Heart of the Network

MARITIME
Sailing to Success

IP CONVERGENCE
Meeting the Challenges

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Editorial

A WHOLE NEW WORLD OF OPPORTUNITIES

These are exciting times for Nexans Cabling Solutions and all its partners. Some very significant developments are currently taking place and creating a whole new world of opportunities for us all. It is important that we respond positively to these trends and make the most of the potential they bring.

We are seeing the traditional LAN infrastructure, in which we have many years of experience in delivering high quality cabling solutions, becoming a platform for many other applications. As well as data and voice, the IP network is increasingly being used as the medium for surveillance and access control, for fire safety and for facilities management and a whole range of other services. The much talked about world of 'convergence' is definitely arriving.

Convergence means that organisations are going to become even more dependent on having a robust and reliable cabling architecture. This presents innovative companies with many new opportunities. To address them effectively, we need a good understanding of both these new applications as well as the underlying technologies themselves. At Nexans we are already building up our capabilities and have forged a number of strategic alliances with experienced partners in key areas.

We are also seeing standard IP networking and communications being used outside 'traditional' areas of deployment. The LAN is extending its reach well beyond the walls of the office into more challenging environments – in Data Centres, industry, in the maritime sector and oil and gas for example, where previously, much more expensive and inflexible proprietary technologies had to be used. This trend further extends the potential for Nexans and its partners and we have already seen some notable successes in industries that lie outside the former extent of the network's embrace.

Having tried-and-tested working solutions in the field sends a powerful message to customers about Nexans ability to provide solid, dependable solutions. But for many enterprises, running IP in these new scenarios or putting new applications onto the network, is a new and unfamiliar concept. For these customers, there is no more effective way to demonstrate the potential benefits than to show them exactly how they work in a real-world situation.

To this end, we have equipped the Nexans Intelligent Enterprise Solutions (IES) competence centre in the UK with all the very latest IP-based technologies and systems. Customers and partners who visit us there can see for themselves how these new solutions deliver enhanced productivity and improved return on investment.

As well as showing very clearly that Nexans is prepared to practice what it preaches, this is also a demonstration of our continuing commitment to investing the future in the technologies that will deliver benefits to customers and new business opportunities for our partners.

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The heart of the network

The growing demands that organisations are placing on their Data Centres means that organisations are having to increase the amount of power and bandwidth that they provide to the heart of their network infrastructure. This presents Nexans and its partners with some very exciting opportunities.

It is impossible to understate the importance of the Data Centre to enterprise customers today, says Harry Forbes, Chief Technical Officer at Nexans Intelligent Enterprise Solutions (IES). "The Data Centre is basically a warehouse for all your electronic data and if you are a large financial organisation, for example, every transaction is going to be recorded on that resource."

DIFFICULT CHALLENGES

Companies face a number of difficult challenges in managing the expansion of the Data Centre. As well as being the heart of the entire data network and the repository for all business-critical information, it is the focal point of new applications and systems deployment. A number of issues are placing additional and significant pressure on the Data Centre. The mounting volume electronic data is putting pressure on storage space, compliancy issues are driving the need to retain more information, and convergence is increasing the volume of traffic that the network has to support. For many organisations, there is also a requirement to be operational 24-hours a day – a function of increasing globalisation and the growing importance of e-commerce.

Storage requirements alone are doubling every year and rather than simply throw more capacity at this problem, companies have been deploying virtualisation technologies. This however, means that more fabric switches need to be used to ensure that there are sufficient paths for data transmission between the different storage resources.

PRE-TERMINATED CABLING

To meet this need, Nexans IES has developed a range of high density fibre-optic panels that will support up to 96 fibre ports (48 fibre pairs) in a single 1u panel. They have been very well received, says Forbes. "Customers have been crying out for this kind of solution as it enables them to deploy multiple panels within a rack and support many more fibre ports than they could before."

But while convenient, this solution presents a challenge to installers. It can take five minutes or more to fusion-splice a fibre connector and

DID YOU KNOW?

- Nexans has introduced space saving high-density copper and fibre panels.
- Pre-terminated fibre assemblies enable very fast network deployment and improved performance at the same time. Nexans guarantees as much as 13 connections within a 100-meter 10Gbase-SR Ethernet link.
- Nexans is the first to provide an unconditional warranty for 10 Gigabit Ethernet (10Gbase-T) over copper cabling.

that means that a single panel can take as much as eight hours to complete. Few customers will accept this much downtime and installers often face tight deadlines. To solve this problem, Nexans has developed a method of pre-terminated cabling so that a high quality connection can be made prior to installation (see also page 14).

THE VERY HIGHEST STANDARDS

This has the added, and vitally important, benefit of ensuring that all connections meet the very highest standards. Increasingly, the fibre connections that are being implemented to support increased virtualisation are linking the data network to the storage area network (SAN) and storage devices are usually a significant physical distance from the communications room. Increasingly bandwidth loads of up to 10 gigabits are being placed on these connections and they need to be polished to the highest of quality standards to ensure minimal losses and robust performance.

The pre-terminated OM3 fibre-optic cables, prepared under carefully controlled factory conditions to stringently-enforced quality controls, ensure that the system will support 10 gigabit Ethernet applications over distances up to 600 metres.

Making a move with complete confidence

C&C Technology Consulting

When you are up against tight deadlines and need to give your customer flexibility as well, Nexans has the ideal solutions for Data Centre applications.

C&C Technology Consulting is a UK-based consulting services and solutions company that advises its client on IT solutions and how they can maximise their investments. It has expertise in designing and delivering application provisioning, virtualisation and access infrastructure services and solutions using a range of leading-edge and innovative technologies.

The company has worked with Nexans Cabling Solutions for around six years and it has been a good experience, says Managing Director of the company, Ralph Colombo. "We are independent consultants and we use Nexans quite a lot. We have always found their products to be good quality and reliable and they perform in accordance with the industry standards. They are also very responsive in terms of their supply and support."

When C&C was asked to perform a Data Centre re-location for an important customer, it found good use for some of Nexans latest offerings. The client in question was a very important one for C&C – a leading legal firm with a global presence, which wanted to relocate its Data Centre from London, to a more secure site in Birmingham.

A lot of rack-mounted and other equipment that could not be located in racks needed to be installed in the new Data Centre and this presented C&C with several challenges. "The sheer space that the cabling requires and fitting all the connections into the space available and giving the customer the flexibility to perform moves, additions and changes was a real challenge," says Ralph Colombo.

In addition, the re-location needed to be carried out during a single weekend so time was critical. By using Nexans pre-terminated cabling solutions, C&C was able to map out consolidation points in the network design which meant that, when it came to installing cables, the engineers simply had to plug in the right connections. The re-location was a complete success and thanks in no small part to the cost-effective and high quality solution that was provided from Nexans.

DEMAND FOR PROCESSING CAPABILITY

Another challenge in the Data Centre is the increasing demand for processing capability. Blade servers are being used to cram more power into smaller physical spaces and this raises two issues – how to deal with the increased bandwidth, and how to deal with the heat that the processors will generate.

Deploying fibre here would inflate cost too much and until now, most network designers have cascaded gigabit copper switches to overcome this problem. However, the recent development of an IEEE 802.3an standard for running 10 gigabit Ethernet over twisted-pair copper promises to provide a more cost-effective and practical solution. Nevertheless, when using copper cable for such high data rates the effects of alien cross-talk need to be overcome, and Nexans has

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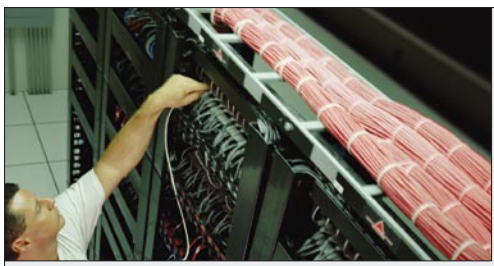


Quality you can depend upon

GGRZ Münster

If you want to make sure that the Data Centre is resilient and future-proofed, there are no better solutions than Nexans.

Based in Münster, central Germany, GGRZ specialises in T systems and infrastructure and was asked to provide systems for the new premises of Asset Managers Westfälisch-Lippische Vermögensverwaltungsgesellschaft (WLV). They worked with specialist partner, Netsystem, to deliver the cabinets, patch fields and cabling needed for the server rooms and infrastructure.

Having outgrown its previous location, WLV wanted to implement the very best and most modern solution for its Data Centre – one that would support its needs for many years into the future. As the requirements for the cabling infrastructure were very high, both fibre and Cat-7 have been implemented into the network, and Nexans high-density panels used, to provide long-term investment protection to the customer.

> **"The quality of data cables, plugs, and connectors is very high. Nexans products are very well thought-out and made."**
>
> ROGER SCHWENTKER,
>
> CHIEF TECHNOLOGY OFFICER, GGRZ

This structure, says Roger Schwentker, Chief Technology Officer (CTO) at GGRZ, ensures that the network delivers excellent availability and has built-in redundancy, so the company is well-protected against down-time. This helps to protect the company's investment and plan for the future as well.

The Nexans solution has the key criteria for quality standards and physical characteristics and has been able to deliver exactly what was required. "The quality of data cables, plugs, and connectors is very high. Nexans products are very well thought-out and made."

GGZR and Netsystem are currently undertaking the final stages of equipping the Data Centre and are able to do so with complete confidence in the cabling and patch panel infrastructure that is supported by Nexans solutions. As well as meeting current requirements in the new building, they will support future needs as well.

Cont. from previous page

developed and introduced a range of shielded systems that will meet the most demanding needs for 10G support, ensuring data integrity and a high Quality of Service (QoS).

As this shielded cable is smaller than UTP cables built to meet the same standards there is an immediate benefit in space saving. The introduction of water cooled cabinets with a cooling capacity up to 25KW means more blade servers are being deployed in a single cabinet which in turn is creating congestion problems beneath the floor where extra cabling needs to run.

Nexans have also taken into account the need to support PoE (Power over Ethernet) as more IP devices such as VoIP phones, IP security cameras and wireless access points put an increasing strain on power loading requirements. As the demand for more power increases, elevations in cable temperature are a possibility. The combination of conductor and shield design ensures voice traffic integrity is not affected by increases in temperature or unwanted noise.

NEXANS INTELLIGENT ENTERPRISE SOLUTIONS IN THE DATA CENTRE

Challenges
- Mounting pressure on storage capacity
- Compliancy driving need to retain information
- Convergence increasing traffic loads
- Need to put more power into a smaller space

Solutions
- High-density fibre-optic panels
- Pre-terminated cabling solutions
- High quality shielded copper solutions
- LANsense Intelligent Infrastructure Management

Benefits
- Greater scalability in the Data Centre
- Faster deployment of high-quality connections
- Improved flexibility
- Better management and control
- Reduced cost

INTELLIGENT INFRASTRUCTURE MANAGEMENT

"With increasing port density, the growth in bandwidth and traffic, the need to manage resources and ensure that the entire system is

The re-location was a complete success and thanks in no small part to the cost-effective and high quality solution that was provided from Nexans.

"It's more important than ever now to ensure that your core capability on the data switches and cabling infrastructure is properly managed."

HARRY FORBES, CHIEF TECHNICAL OFFICER, NEXANS INTELLIGENT ENTERPRISE SOLUTIONS (IES)

performing efficiently is growing so demand for intelligent infrastructure management is on the increase," says Forbes. "It's very important that your port capacity on the data switches and cabling infrastructure is properly managed. You need to know which ports are allocated so that you can make maximum use of the resources that are available and be able to rectify faults quickly."

LANsense can provide a complete map of port usage, so that instead of simply installing more switches when more capacity is needed, what is there already can be used to its full capabilities. When a disconnect occurs, technicians can immediately identify and rectify where this has happened.

The Data Centre is going through a paradigm shift in technology, applications, deployment, environment, and its management. Both customers and suppliers alike are faced with greater challenges to overcome as many of these issues are beginning to overlap. New standards are being created to enable consistency and compatibility as we move forward; however, they do not provide the answers to all the questions.

"Nexans therefore, have endeavoured to stay ahead of these issues whilst working closely with customers to ensure the right solutions are available and the customer can make a much more informed decision," says Forbes. ■

OTHER COMPANIES THAT HAVE CALLED UPON NEXANS FOR THEIR DATA CENTRES INCLUDE

- Bouyges Telecom – Paris – France
- Pilkington AG – Gelsenkirchen – Germany
- Belgacom – Brussels – Belgium

Sailing to success

When you are building an on-board network for a ship, you need to ensure that the cabling is reliable and will meet needs for a considerable time into the future – that's why, when it really matters, installers in the maritime industry choose maritime solutions from Nexans.

Network cabling in a sea-going vessel needs to withstand the most challenging conditions. When the Institute of Marine Research (IMR) in Norway needed to equip its new research ship, *G.O. Sars*, in 2003 it turned to specialist maritime consultant engineers and Nexans partner, SOhome, to provide the resilient cabling and network infrastructure required to support the numerous on-board systems that were to be installed.

THE VERY BEST QUALITY

It was vitally important for the ship to be equipped with cabling of the very best quality and SOhome recommended the use of Nexans Cat-7 and fibre-optic solutions, that would be completely immune to interference. "The screening is very important, especially in the areas where we have a lot of electro-magnetic interference and we all have some very big transformers and UPS units that make a lot of electrical 'noise'," says Chief Electronic Engineer on *G.O. Sars*, Martin Dahl.

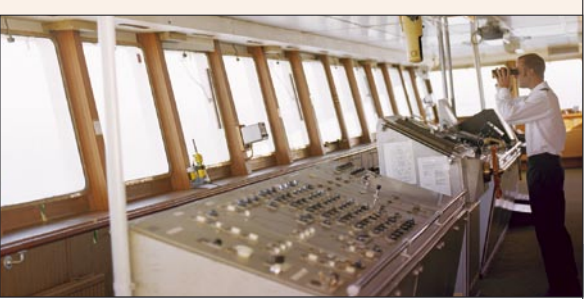
> **"You need the very best cabling on a ship because you don't want to have to re-cable it in five or 10 years time."**
>
> PER SCHULHUS,
> DIRECTOR AT SOHOME

G.O. Sars

The anatomy of the on-board network

The *G.O. Sars* is owned and operated by the Norwegian Institute of Marine Research (IMR) and the University of Bergen. It is at sea almost all the year round, measuring fish stocks and conducting research, mostly in the North and Barents Seas.

The ship has two independent networks – one for administration, the other linking scientific equipment. Outdoor cabinets and Cisco switches are connecting a fibre backbone. To prevent electromagnetic interference choosing the right cable type is vital. Average cable lengths on the ship are 35 metres and no channel is more the 70 metres in length.



As well as specialist surveying, navigational and electronic equipment, *G.O. Sars* also has an extensive Ethernet LAN. As much as 200 gigabit of data can be collected in a single day and the ship has a huge 2.4Tb of storage capacity. This information needs to be analysed on a continuous basis. The numerous satellite and radio communications systems that are used to do this and keep in touch with other vessels, ports and land-based colleagues, can also cause interference with network signals.

Future-proofing was just as important. The technology that is used to measure fish stocks and conduct seismic surveys is continually developing and this places additional strain on bandwidth.

A SOLID AND DEPENDABLE FRAMEWORK

G.O. Sars will not be refitted for perhaps 20 years and this is the first opportunity that the Institute will have to run new cables. "It is very difficult and expensive to do that so it was important to go for the very best quality that is available from the start," says Dahl. The ship's network already operates the backbone at 1 gigabit and it is likely to move to 10 gigabit in the future. Nexans Cat-7 and fibre cabling will enable it to do this easily.

Dahl says that the cabling has proved to be very reliable and has easily met the required standards for reliability and performance. It has continued to give the ship's network a solid and dependable framework for its on-board network.

While it is fairly obvious that an ocean-going ship would need the most resilient and high performance screened network cabling available, there are many other environments in which similar qualities are now required, says Per Schulhus, Director at SOhome, who worked with the IMR on the *G.O. Sars* project.

"We have completed a number of projects in the marine industry and we are seeing many more land-based installations now. You need the very best cabling on a ship because you don't want to have to re-cable it in five or 10 years time. Compared with the cost of doing that the cost of the cable is nothing."

There are many potential users – SOhome is enjoying particular success in the oil and gas exploration markets in Norway, where the capability of high bandwidth networks is making life easier, not only in the professional sense for ship- or rig-based workers, but also in a personal one, as it becomes much easier to provide each individual with Internet access, voice and television services over the network. ■

DID YOU KNOW?

- Nexans provide products with marine certification such as Lloyds.
- Nexans has specially designed maritime patch panels for the shipping industry. They are robust and designed to resist to corrosive environments and vibrations.
- Nexans LANmark-7 Maritime cables pass all fire tests required by the shipping industry.

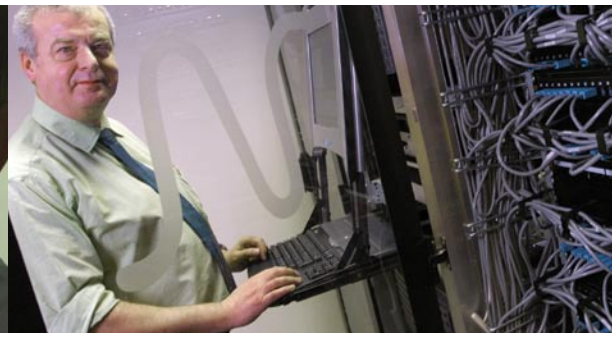
OTHER MARITIME COMPANIES THAT HAVE CALLED UPON NEXANS INCLUDE

- Royal Navy – the Netherlands
- French Navy – France
- BP Azerbaijan – Caspian Sea – Azerbaijan
- Grieg Billabong AS – Bergen – Norway

Building a reputation

How SOhome is benefiting from its partnership with Nexans

SOhome has now equipped more than 30 vessels with the Nexans solutions worldwide. Two new research vessels for India have recently been equipped with similar systems to those in the *G.O. Sars*, and SOhome is also working on a turnkey maritime LAN for the new research vessel, the James Cook, for the UK, as well as a number of other maritime projects, all of which will utilise products from Nexans Cabling Solutions.



Spreading the word

With Nexans Intelligent Enterprise Solutions (IES) now operating as one of the key competence centres of Nexans Cabling Solutions, partners are beginning to be exposed to the massive potential that LANsense delivers as more end user organisations turn to intelligent management to maximise the value of their investment and drive down costs. *Cable the Future* talks to two of the key people behind the business development of LANsense.

More applications are converging onto IP networks today and much greater emphasis is being placed on controlling cost and managing resources in the enterprise. Nexans LANsense Intelligent Infrastructure Management solution gives customer the power to take control of their network. For partners this represents a tremendous opportunity.

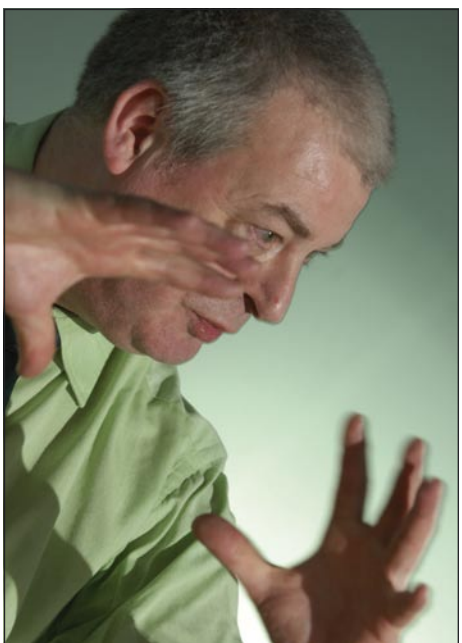
LANsense is based on established industry-standards, so users can deploy it with total confidence. The network infrastructure and everything on it can be monitored with precision. That means that network managers can take complete control of all network resources – from switches and routers to network cameras and environmental systems.

UK Business Development Manager, Neil Dellar, says that you should think of LANsense as "the management glue that holds all the disparate systems and parts of the network together" or perhaps as the 'missing link' between the management of the network and physical layers.

IMPROVED EFFICIENCY

In essence, LANsense delivers benefits in two main areas – improved efficiency and reduced cost. It gives organisations full control over all network assets as well as the traffic that runs over them. It tracks all network activity in real-time, pinpointing faults on the cabling system within moments. As well as making it much easier and quicker to trouble-shoot and recover from faults, LANsense enables IT managers to plan and schedule changes, reducing potential for downtime when adjustments are necessary.

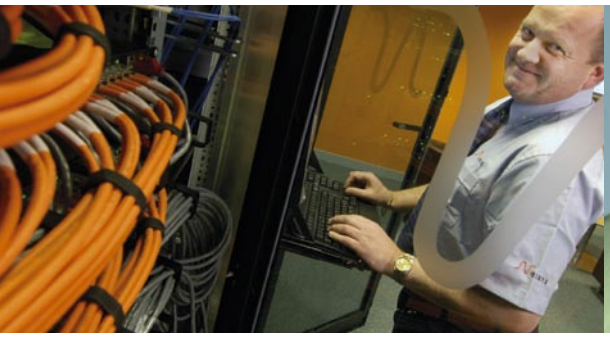
It also makes it easier to deploy new devices and applications on the network. Security applications and voice over IP are two areas in which there is a great deal of interest at the present time.

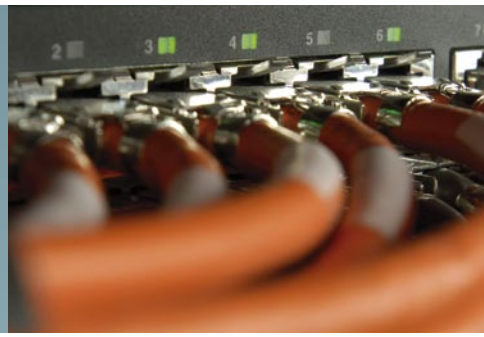


"It is a real solution and a different kind of sale but once you understand it, this is a very attractive and valuable part of the market to be in."

TONY CHAMPAGNE,
EUROPEAN BUSINESS DEVELOPMENT MANAGER,
NEXANS INTELLIGENT ENTERPRISE SOLUTIONS

Cost is reduced significantly as all available ports and switches can be used to their maximum capabilities. LANsense gives the administrator a complete view of the network and when a new connection is needed, instead of installing new switches or panels to provide





additional capacity, available ports can be identified and pinpointed immediately. This also means that additions and changes can be made much faster and with more precision resulting in a network that is very efficiently configured and able to deliver optimum performance.

MASSIVE POTENTIAL

With the cost and efficiency benefits feeding off each other in this way, customers very quickly realise a return on the investment in LANsense. This makes taking the solution to the market much easier for partners once they have developed the necessary expertise.

This is something that Nexans IES is working hard to develop across the whole of its partner network at the moment. The company wants to encourage partners with the right skills and capabilities to adopt the solution – and take a solutions-led approach, says European Business Development Manager, Tony Champagne. "There is great potential and nothing to be scared of with LANsense. It is a different kind of proposition to passive cabling solutions but once you understand it, this is a very attractive and valuable part of the market to be in."

Another important benefit of LANsense is the fact that it is a tried and tested solution and comes from a very well-established and respected organisation. A series of case studies that demonstrate how major enterprise organisations have benefited by deploying LANsense is available and the customer list is impressive and includes illustrious names such as HSBC, UBS, and THK-BP.

While these are amongst Europe's largest companies, mid-sized business can now also benefit from LANsense. Nexans can now offer a version that gives administrators of smaller networks all the benefits but without the scale and complexity needed to support very large infrastructures.

This expands the potential for partners who can now target smaller companies within their customer base, who may not have the budgets and resources to deploy the complete enterprise version.

POWERFUL PROPOSITION

Dellar says that an increasing number of the tenders include some requirement for intelligent management. "People are starting to realise that they need to manage their infrastructure, utilise what they have more effectively and reduce the cost of running their network – and that's exactly what LANsense enables you to do," he says.

With many applications now converging on the IP network and the need for improved management and control growing, the potential for LANsense is immense and Nexans has a truly unique offering in the market. No other company can claim to have more experience or a better reputation in providing high quality, structured cabling solutions and, allied with the built-in intelligence of LANsense, this makes for a very powerful proposition indeed.

"The opportunity is there – all partners have to do is embrace it," says Dellar. "IES and Nexans are here to help you do that and we now have the knowledge and expertise to meet the complete end-to-end and convergence needs of the customer." ■

"LANsense delivers accurate, real-time information to make management easier, keep costs down and deliver rapid return on investment."

NEIL DELLAR,
UK BUSINESS DEVELOPMENT MANAGER,
NEXANS INTELLIGENT ENTERPRISE SOLUTIONS

Meeting the challenges of IP convergence

Everyone is talking about the convergence of voice, data and other applications onto IP (Internet Protocol) networks and Nexans, through a series of strategic partnerships and initiatives is paving the way for its partners and customers to reap the maximum reward.

The convergence of all applications onto the IP network is now irreversible. Not only is IP the medium for data and voice in the enterprise now, it is also becoming the vehicle for security applications, access control and IP surveillance.

COMPLETE END-TO-END OFFERING

The Nexans approach to IP convergence is comprehensive and long-term. The company is developing its own specialist skills and solutions and forging partnerships with experts in other key areas. As well as all the products needed to address the IP market effectively, this approach is also giving partners access to the expertise and training they need to develop their own capabilities in IP applications.

The result is a complete end-to-end offering that can meet the IP convergence needs of all customers and gives partners the solid foundations they need to build good business.

VITAL PARTNERSHIP

One of Nexans key partners is security specialist, Gardiner Group. IP-based video surveillance and building access control are expected to be major growth areas over the next few years. As one of Europe's largest independent distributors of electronic security solutions and products, Gardiner is ideally positioned to help partners move into this potentially lucrative market.

Colin Kramer, Gardiner Group Purchasing and Marketing Director, says: "We have a strong position in the traditional electronic security market and have seen IP surveillance technology entering this sector, opening up a whole new market opportunity. We decided that the best way to stay ahead was to form strong partnerships with companies that have expertise and understanding of the key technologies within the network market and for us, Nexans is an ideal partner. They have a very keen awareness of where the market is going."

What is IP convergence?

Internet Protocol has long been established as the standard protocol across all networks and the convergence of data and voice onto IP is already taking place. Increasingly, other applications such as access control and video surveillance are also being moved onto the IP infrastructure. The benefits of running all of these applications across a single network infrastructure are enormous – there is only one set of cables to install and maintain and as all data, voice and other types of traffic are running across a single system, it is much easier to monitor and manage the network and gather accurate and useful management information about performance, usage and return on investment.

IP-based video surveillance applications are now within the reach of many more companies. By deploying professional-class systems across the existing network, and controlling them from a central point, organisations can reduce cost significantly. There is also strong growth in physical access control, fire systems, public address and intruder alarm systems. All of these are now being integrated onto the IP network.

The partnership between Nexans and Gardiner delivers everything that partners need in order to build up their skills and develop opportunities. Not just products, but also specific expertise and experience and training and support.

The two companies work well together, says Colin Kramer, "We have similar cultures and also broad European coverage, the relationship is growing stronger and is showing very promising signs, for both parties, and is providing a very strong and knowledgable bridge into the IP convergence sector."

Nexans has also formed partnerships with other specialist suppliers in key areas, such as wireless networking and Power-over-Ethernet (PoE). The latter in particular is going to be important to the appeal of IP applications as it gives customers the ability to deploy devices such as IP-based cameras, phone handsets and wireless access points, at any point on the network, without the need for mains power supplies. This makes deployment much faster, more flexible and cost-effective.

These relationships add value to the overall proposition and enable Nexans to continue focusing on its strengths in cabling and infrastructure management. These will, it should not be forgotten, remain absolutely fundamental to efficient converged networking solutions.

A LIVING DEMONSTRATION

To demonstrate just how effective a complete IP-enabled organisation can be, Nexans Cabling Solutions has turned the main office of its IES competence centre into a living demonstration of all the technologies it is bringing together. The office is not only equipped with VoIP, but also fully integrated with CCTV-, access control- and intrusion alarm systems, which are all IP-based.

In addition, Nexans is deploying LANsense to show exactly how effective intelligent management can be. By deploying LANsense, partners can bring the whole IP network and the different applications running across it, together, and give administrators full control of their resources. "We want to be able to actually do what we say we can do for our customers," says UK Business Development Manager, Neil Dellar. "We are all seeing convergence happen before our eyes."

Development work on additional IP and convergence capabilities is progressing and we will see new functionality integrated into LANsense over the next few months. As well as making LANsense an integral part of its comprehensive approach to IP networking, Nexans is also helping partners to develop LANsense as an opportunity in its own right (see article page 10).

Nexans is becoming a centre of excellence and expertise in IP, as well as delivering proven solutions. This is enabling partners to offer their own full-service proposition to their own customers. As the opportunities to add new and exciting applications to the IP network expand, this approach will help partners open new doors and make the most of the massive potential that the market holds. ■

NEXANS AND IP CONVERGENCE

Challenges

- Bandwidth and quality need to be assured
- Changes to physical deployment of devices
- How to power devices?
- New skills required in new applications
- More management of devices needed

Solutions

- Expansion of physical infrastructure
- Enabling end-to-end converged IP solutions
- Strategic partnerships with expert suppliers
- Development of strong proof-of-concept by Nexans
- Power over Ethernet
- LANsense Intelligent Infrastructure Management

Benefits

- Single point of contact for all IP convergence needs
- LANsense gives you control over the whole IP network
- Tried and tested solutions from established global suppliers

OTHER COMPANIES THAT HAVE CALLED UPON NEXANS FOR IP CONVERGENCE INCLUDE

- Renault – Paris – France
- Atos Origin – Eindhoven – the Netherlands
- Al Manzil Resort & Spa – Dubai – United Arab Emirates
- National Commercial Bank – Jeddah – Saudi Arabia

PLASTIC OPTICAL FIBRE

Plastic fibre comes of age

The latest Nexans plastic fibre products will soon be available from Nexans.

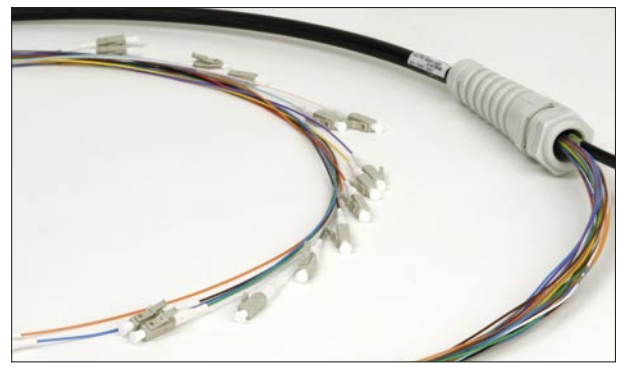
Within the next few months we are going to enter a new era in the development of cabling systems as Nexans new generation of plastic optical fibre (POF) cables arrives on the market. By using a revolutionary new type of material, Nexans has been able to overcome the limitations of previous POF products and create plastic cables that are capable of carrying IP traffic at gigabit speeds.

"The secret," says Director Product Marketing and Business Development at Nexans Cabling Solutions, Martin Rosbach, "is in the use of Cytop, a material that is more transparent than those used previously and reduces the potential for attenuation. There are already a number of pilot installations and the POF offering should be widely available soon."

The big advantage of POF is that it overcomes the problems that can arise with glass fibre, which for certain types of application can prove to be too brittle and difficult to terminate.

The new type of POF will be much easier to install and Nexans is also developing a unique connector for its cable using standardised fibre connectivity formats.

This, combined with the added flexibility of the cable, will mean installing POF will take much less time than it would to install conventional fibre or copper cables, and this time saving will more than compensate for the initial higher cost of the material.



PRE-TERMINATED FIBRE ASSEMBLIES

Setting high standards

Pre-terminated fibre cables enable installers to deliver a technically superior solution while saving significant installation time.

There are always occasions when installers find it a challenge to meet customer needs, both in terms of performance and delivery timescales. In such situations, Nexans range of factory-produced pre-terminated cabling can provide a very convenient solution.

The technical superiority of pre-terminated cabling is their biggest advantage. Each cable is produced under carefully controlled conditions with connectors fitted at each end. The result is reduced link loss compared to on-site termination; and cables can be used over longer distances or, if required, more connections can be fitted on links. All pre-terminated assemblies are fully tested before being released and a full report is provided.

Pre-terminated cabling can be useful for inter-building and campus applications or for horizontal fibre distribution, as well as trunk connections to data-centres and SANs. In addition they are technically superior and can be manufactured to exact specifications, making installation faster and easier and meeting customer needs precisely.

A re-usable pulling eye system is positioned at the end of the cable to protect the terminations while pulling the cable through ducts. Once installed, this is removed and the terminated fibres are fed into a patch panel.

Assemblies can usually be supplied within two weeks so the lead-time from order to delivery is very short. They are delivered in strong, reinforced tubes, the cable is well protected and also easy to disassemble and re-use.

INDUSTRIAL CABLING
Meeting the industry standard

Nexans LANmark Industry cabling system is built to meet the stringent standards, transmission needs and environmental requirements of IT and automation solutions.

Ethernet is increasingly being used as a way to support the integration of IT within industrial automation systems. But to do this effectively, cabling must comply with the requirements of the new standards that have been developed by the ISO and IEC.

Nexans has responded by developing the LANmark Industry solution – a set of ruggedised products, specifically designed to operate in industrial environments. Manufactured with special compounds and easy to assemble, LANmark Industry cabling delivers electrical and mechanical performances necessary for the deployment of IT within production areas.

With its broad range of products Nexans Cabling Solutions can match most customer's requirements and budget. Mechanical, ingress, climatic and electro mechanic (MICE) constraints have been considered. Advanced materials such as polyurethane, special PVC and polyamide together with IP67 rated outlets and connectors with gold plated contacts are being used to match these various environmental conditions.

DATA COMPETENCE CENTRES
Leading edge solutions that partners can depend on

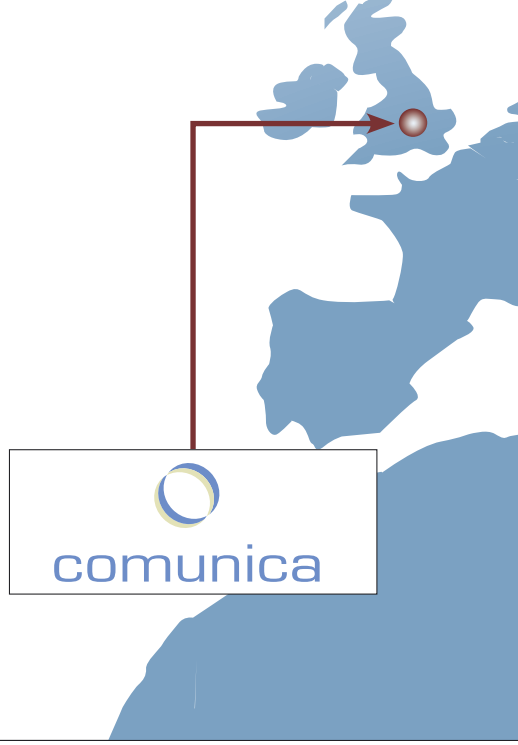
Nexans Cabling Solutions is strongly R&D focussed and works with three competence centres. One in Buizingen (Belgium) specialised in connectivity products and technology, one in Basingstoke (UK) where Nexans Intelligent Enterprise Solutions focuses on Intelligent Infrastructure Management. The third is the Nexans Data Communications Competence Centre (DCCC), a state-of-the-art research, test and design facility located in the USA. It develops advanced materials, techniques and processes that will deliver reliable cabling solutions for customers that provide enhanced value at lower costs.

The centre provides a reliable benchmark for product and technology development by optimising legacy LAN cabling systems to leading edge, multi-gigabit data communications networks. Its laboratories use comprehensive analysis and modelling tools to simulate real-world conditions and test systems and components.

Current programmes at the DCCC include research into the robustness of LAN cabling systems for 10Gb/s applications and the development of comprehensive modelling and simulation to support IEEE 802.3 10GBASE-T and other next-generation network applications. The DCCC also works with other parts of the Nexans organisation to develop specialist products. It is, for example, conducting tests on fluoropolymer materials in conjunction with Nexans Research Centre. These and many other programmes that are being run at the DCCC, help to ensure that Nexans – and its partners – always have access to the very latest technologies and that Nexans solutions always confirm to industry standards and are thoroughly tried and tested before they are presented as practical, reliable solutions that customers can depend upon.

Partnering for profit across the globe

For many Nexans partners, their relationship with the world's leading provider of cabling solutions is vitally important to their success in both the short- and long-term.



Bayanat DPS – United Arab Emirates

Developing the skills to deliver

Bayanat Data Processing Systems (DPS) is one of the leading providers of integrated IT and telecommunications networking solutions in the Middle East. For over 20 years, DPS has been helping customers design and implement complex communications systems and today combines skills in passive cabling and intelligent infrastructure management (IIM) to offer a unique service in the region.

Managing Director of the company, Georges Hannouche, says that its partnership with Nexans is central to its long-term success. "We started working with Nexans in 1998 and have an excellent relationship with them. They have been involved in some of our biggest and most important contracts."

DPS is widely regarded as the best and most experienced provider of networking systems in the UAE, where the economy is growing quickly, and succeeded in developing an excellent capability in both passive cabling and IIM. They have become an active and enthusiastic supplier of the LANsense solution.

Having recognised the potential, Hannouche set about broadening DPS's knowledge and skills in IIM several years ago. "It was well before Nexans bought the LANsense business that we sensed the market was moving in that direction and we trained our people and acquired the tools and the technical capabilities needed to develop our skills in intelligent management."

DPS had already identified LANsense as the leading solution and forged relationships before Nexans acquired the brand. This was a fortuitous co-incidence, says Hannounche and one that has served to strengthen the bond between the two companies. "One of the reasons we have been so successful is our partnership with Nexans and excellent support that they have provided for us here in Abu Dhabi and I expect that to get even better now." ■

> **"One of the reasons we have been so successful is our partnership with Nexans and the excellent support that they have provided for us here in Abu Dhabi and I expect that to get even better now."**
>
> GEORGES HANNOUCHE,
> MANAGING DIRECTOR, BAYANAT DPS

Bayanat DPS sales team

Comunica – UK

Taking the intelligent approach

Comunica specialises in infrastructure solutions and provides design, implementation and project management services for networking and telephony and intelligent systems. While the company is based in the UK, it has clients throughout Europe, South-East Asia, China and Russia.

Managing Director Rick Marshall, is enthusiastic about its partnership with Nexans. "Our relationship goes back to 1996 when we started working with ITT on structured cabling systems and since that time it has become a very good partnership. We work together with Nexans to develop mutual opportunity."

Comunica is a leading supplier to financial services organisations and Nexans has provided vital support for a number of major projects undertaken for large banks.

"One reason the partnership works so well," says Marshall, "is that it extends right across both organisations. We have always had a very

good relationship with them throughout the business and that's been extremely valuable to us. It is very important to have their back-up and support when we are working on important projects."

Continued investment is also important. "Nexans has seen how strategically important intelligent management solutions are going to be in the future and embraced that opportunity. They are investing considerable effort in research and development and I think that is important. Some organisations simply use intelligent solutions as a badge to take into accounts but you really need to make that solution your own and build value into it and I think that is exactly what Nexans is doing with LANsense."

This approach complements Comunica's own strategy and the two companies share many of the same goals and visions, says Marshall. This also helps the relationship to thrive. "We deal with a lot of suppliers and it is much better if you have everyone on the same page and sharing the same goals and objectives and that is certainly the case with Nexans." ■

Cfr. cont. next page ▶▶▶

> **"We work together with Nexans to develop mutual opportunity."**
>
> RICK MARSHALL,
> MANAGING DIRECTOR, COMUNICA

Cont. from previous page

Amec Spie – Germany

Building long-term customer relationships

With 22,000 staff and a keen specialisation in the provision of multi-technical services for the electrical engineering, automation and construction sectors, Amec Spie System Integration GmbH is one of the leading cabling installers in Europe, and also has a strong presence in the fast-developing economy of Morocco.

In Germany, where it is the market leader, Amec Spie focuses mainly on communications infrastructures and security systems, building long-term customer relationships with partnerships and a commitment to quality the cornerstones of its strategy.

> **"Nexans excels through responsiveness and flexibility in answering customers' needs, and by delivering high quality in its solution, and competitive pricing."**
>
> PETER KNEIS, DIRECTOR BUSINESS UNIT RHEIN-MAIN AND MEMBER OF THE EXECUTIVE BOARD, AMEC SPIE

"The company has been working closely with Nexans for the past five years and it has forged an excellent working relationship," says Mr Peter Kneis, Director Business Unit Rhein-Main and member of the executive board at Amec Spie.

"Nexans excels through responsiveness and flexibility in answering customers' needs, and by delivering high quality in its solution, and competitive pricing. It has contributed to Amec Spie's business success too – in particular through its warranty pledge which Nexans maintains consistently."

As a result of this, customers with Nexans solutions are satisfied customers and the partnership with Amec Spie has flourished. "It is Amec Spie's philosophy to use always best-of-breed products but this only works with partners who develop advanced technologies and makes them available to the market. Nexans precisely matches these requirements and Amec Spie will continue to rely on Nexans leadership and innovation to support its own efforts to grow its business," says Kneis. ■

DID YOU KNOW?

- Nexans is represented in over 50 countries with more than 1000 Certified Solution Partners (CSP's) and Value Added Resellers.
- In recent years Nexans CSP's have realised over 4,500 projects covered by a full systems warranty.
- Visit www.nexans.com/ncs for dedicated information and tools for our CSP's, VAR's and channel partners.

NED makes network design easy

All around the world the Nexans Easy Design (NED) tool is making a real difference to partners and is helping them to build cabling solutions that meet all their exact requirements – quickly and cost-effectively.

All over the world, the Nexans Easy Design (NED) tool is being used to help integrators to provide a professional and comprehensive cabling design solution to their customers.

Mr Alain Van Ruyskensvelde, who is in charge of all data cabling installation at Nizet in Belgium, says it has been important to several major projects. "NED allowed us to produce diagrams customers could understand and agree with during the tender phase as well as during the installation. It really saves time and is very useful from a budgetary prospective."

With its easy to use interface and clear reporting to a drawing tool and an Excel file of the designed components into a bill of materials, NED helps demonstrate the benefits of Nexans cabling solutions, swiftly and effectively. Being able to estimate the number of components and space required is invaluable, says van Ruyskensvelde, as is Nexans global status.

"The fact that the NED solution is established and used all over the world is important. We have a lot of international companies here in Belgium and it reflects well on us that we are a Nexans partner."

The continuing development of NED, embracing new technologies such as 10 gigabit Ethernet is also important says Alain Van Ruyskensvelde, as this enables partners to maintain its leadership over competitors.

SCALABLE AND EASY TO INTEGRATE

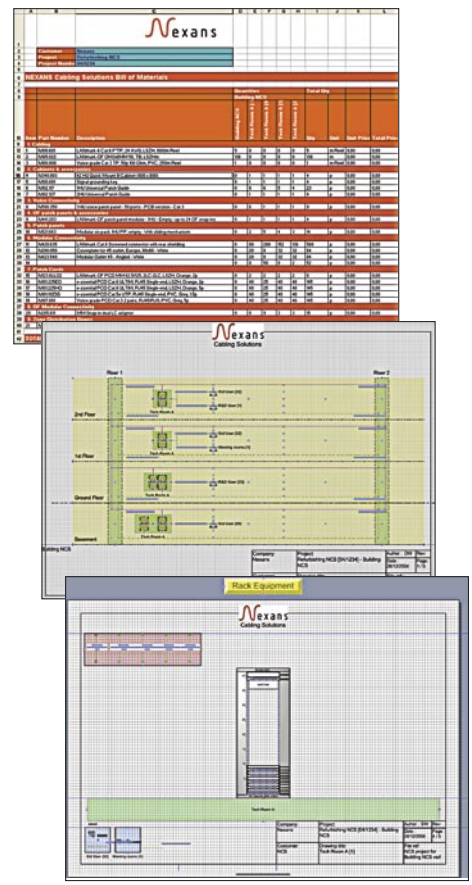
Moscow-based Nexsotel, is an accredited trainer for Nexans and Senior Trainer at the firm, Andrey Trusov, says that installers always pick up on the potential benefits of NED very quickly. What is particularly notable, he adds, is the scalability of the solution and the amount of time it saves on routine document work.

"It is capable of meeting the needs of a designer dealing with either big or small projects. A considerable amount of time is spent in the preparation of standard documents and the more these processes can be computerised, the more time highly-skilled experts can spend on the actual design."

It is very easy to learn how to use NED and its ability to integrate with Microsoft Visio and other graphics editors, he notes, is also very useful, as it enables document templates and data to be shared very easily.

AN ESSENTIAL TOOL

These are also features of NED that Digicom, the leading network integrator in the Philippines, has benefited from; it is a relative newcomer to NED, having only begun using the software at the end of 2005.



President of the company, Manuel Ong Jr, says that NED has rapidly become an essential tool for design work. "It makes a very good impression on customers and means we can do the design work much faster. It has certainly given us some very positive results," he says.

Digicom is "championing Nexans in the Philippines," says Ong, and the global reputation, combined with the unique benefits NED delivers, helps Digicom to differentiate itself. "Adopting NED was a milestone for us – there is nothing else on the market like it and for us that is a definite plus." ■

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