

smaroptics

Case study

London Internet Exchange improves services for members with Smartoptics' plug and play open line system

"Companies that don't have a specialised optical transport department and are experiencing interconnectivity challenges would be foolish not to consider a Smartoptics open line solution"

— Richard Petrie, CTO and Executive Director, LINX



Robust, reliable infrastructure

The London Internet Exchange (LINX) is a membership organization founded by network service providers and ISPs to improve infrastructure in the UK. With more than 880 member networks in over 80 countries, LINX is one of the largest Internet exchanges in the world. The exchange offers its members peering services enabling them to reduce cost and latency while increasing network control. Today the service platform is based on two hubs in London, with regional exchanges in Wales, Manchester and Scotland, as well as further exchanges in the US and Saudi Arabia.

As a not for profit organisation, LINX invests all its fees back into strengthening their network services. By doing so, the organization can make sure that its infrastructure is up to date and provides their members with top-class network performance, low latency and increased control.

"We are always on the lookout for new technologies that can help bring the total cost of ownership down, so we can continue to deliver the best possible service to our members," describes Richard Petrie, CTO and Executive Director at LINX.

Growing capacity demands new solution

As with all Internet exchanges, LINX has to cope with extreme capacity demands. To be able to address the

Customer: LINX
Industry: Internet exchange
Location: London, UK
Solution: Open Line System
Products: DCP-M40-ER, DWDM
PAM4 QSFP28



Richard Petrie
CTO and Executive Director at LINX



increasing need for more bandwidth the exchange wanted to upgrade its main core ring.

When Richard Petrie and his colleagues at LINX first heard about the Smartoptics Open Line System they were immediately intrigued and could see the potential of the technology and the benefits it would bring. To prove that the new solution could deliver on what it promised, the next step was to thoroughly test the equipment.

Working with their technology partners Juniper and Edgecore, LINX tried out the Smartoptics DCP-M40-ER Open Line System with PAM4 DWDM transceivers developed by Inphi. The collaborative testing proved that the solution would work and gave the membership organization and its partners valuable insight into how to deploy the new solution in real life.

Flemming Heino, Network Architect with LINX, explains: “Spending a bit of extra time bringing our partners together really helped when it came to deployment. It made sure we were all on the same page and meant we could get the project off the ground quicker.”

Reduced cost, increased scalability and ease-of-use all in one

Once deployed the advantages of the new solution were obvious. The compact equipment takes up less rack space, reduces power consumption and costs less than alternative active solutions. The Open Line System also allows LINX to scale their network’s capacity in a far more flexible way than would have been possible with a solution using stand-alone transponders.

“Being able to grow our capacity in a more even way brought a welcome change in cost base - a lack of lumpiness and smoother growth, all resulting in significant CAPEX savings, let alone the OPEX savings,” continues Flemming.



Flemming Heino
Network Architect at LINX

But perhaps one of the biggest benefits is its ease of use. While telecoms’ grade DWDM solutions typically require special expertise to deploy and maintain, the Smartoptics’ solution allows network engineers with limited optical transport skills, to set up the solution with the minimum of help.

“The attention to detail is fantastic. It’s these small, intuitive things that make the Smartoptics solution so easy to deploy and use. The plug and play features of the product really work as advertised and makes the implementation fully automated,” concludes Flemming Heino.

About Smartoptics

Smartoptics provides innovative optical networking solutions and devices for the new era of open networking. Our customer base includes thousands of enterprises, governments, cloud providers, Internet exchanges as well as cable and telecom operators. We have an open networking approach in everything we do which allows our customers to break unwanted vendor lock-in, remain flexible and minimize costs. Our solutions are used in metro and regional network applications that increasingly rely on data center services and specifications. Smartoptics is a Scandinavian company founded in 2006. We partner with leading technology and network solution providers such as Brocade, Cisco, HPE and Dell EMC and have a global reach through more than 100 business partners.

smartoptics

Ryensvingen 7
0680 Oslo
Norway
+47 21 41 74 00

info@smartoptics
[smartoptics.com](https://www.smartoptics.com)