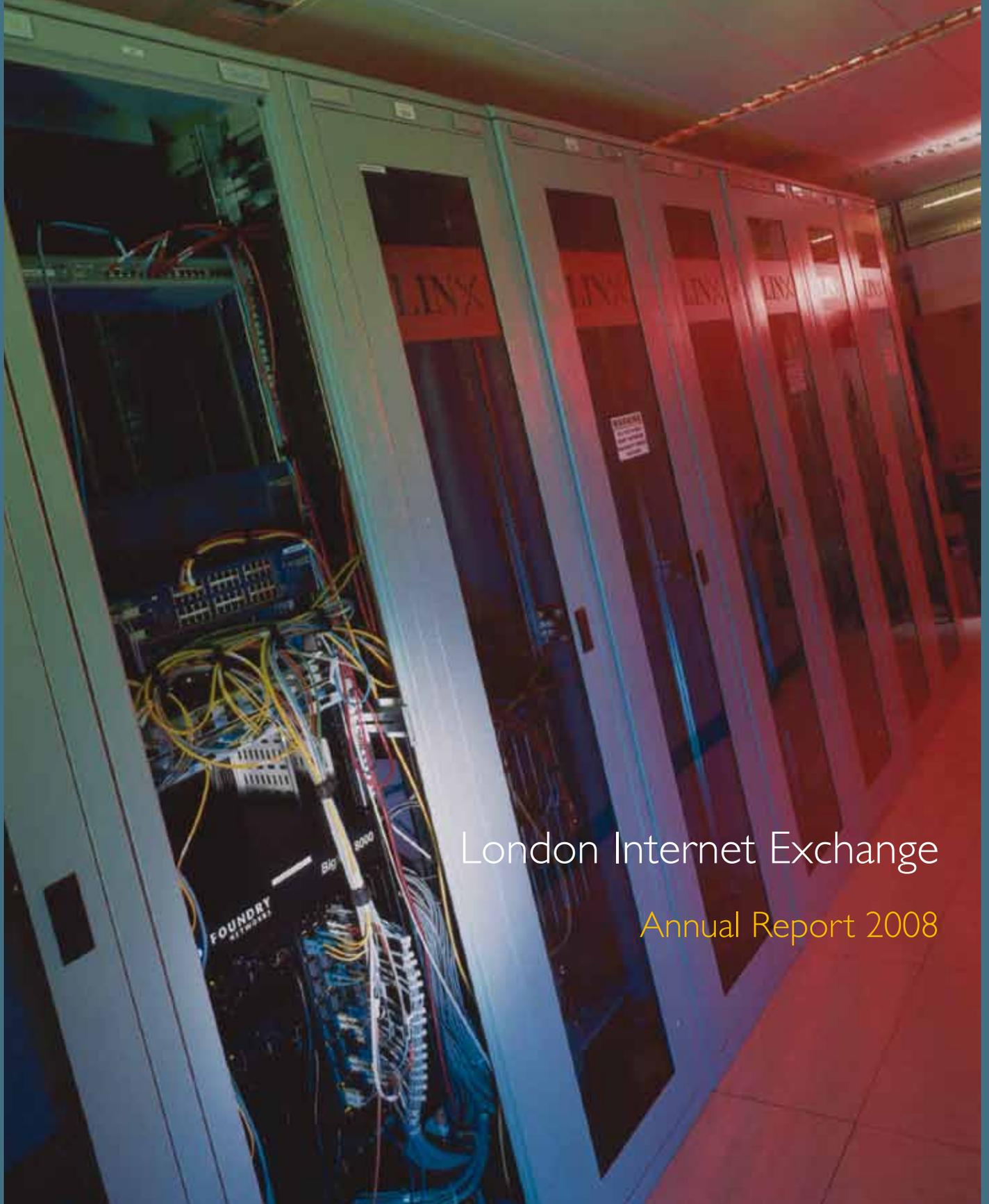


Annual Report 2008



London Internet Exchange

Annual Report 2008

“2008 was a landmark year”

Grahame Davies, LINX Chairman

2008 was a landmark year for LINX; challenging, interesting and successful in equal measure. We've come a long way in terms of membership growth, capacity on the exchange and our Public Affairs activities, and so we're delighted to share some of the year's highlights and milestones with you.

2008 was our most successful year to date. As an organisation committed to its members we are proud to have become the first Internet exchange point to connect over 300 members, which makes us the first exchange in the world to connect so many networks together. This rapid growth demonstrates a growing confidence in LINX and as a result we have been able to improve our service, reduce our members' costs, as well as strengthening our ability to speak to government on behalf of an even more broadly based community. This is something of which I am particularly proud.

We have also made significant geographic advances with our recent expansion into three new points of presence (PoPs) which was the largest project of its kind undertaken by LINX to date. This was extremely well executed contractually and operationally and, I believe, will be recognised as a defining moment and a strategic success for LINX.

With the successes of 2008 we had our fair share of challenges. Firstly, we recognise that the network instability experienced in 2008 was a testing time for our members, as well as for our own workforce. As a result of the tireless commitment of our engineering team, and the way that our entire organisation pulled together to resolve our issues, member; Government and wider industry confidence in LINX remains high.

I'd like to take this opportunity to personally thank all our members for their fair scrutiny, feedback and support that we received during this time; testimony to the culture of trust and transparency that we have fought to earn and will continue to strive to keep.

The statistics within this annual report make impressive reading and show all the hallmarks of a successful, growing company. However, over my lengthy period serving as a Director, and as Chairman from September 2000, I have been pleased to see the organisation remain eager to improve, renew and reappraise all aspects of its operations.

As such, 2008 saw us take an analytical look at the role your board should play in the growth of our organisation and in safeguarding our members' interests. We undertook a successful team-building exercise last year that has helped us redefine how individuals can support our members better; establishing real and reasonable accountability for all our actions, as well as encouraging individuals to engage in open and productive dialogue.

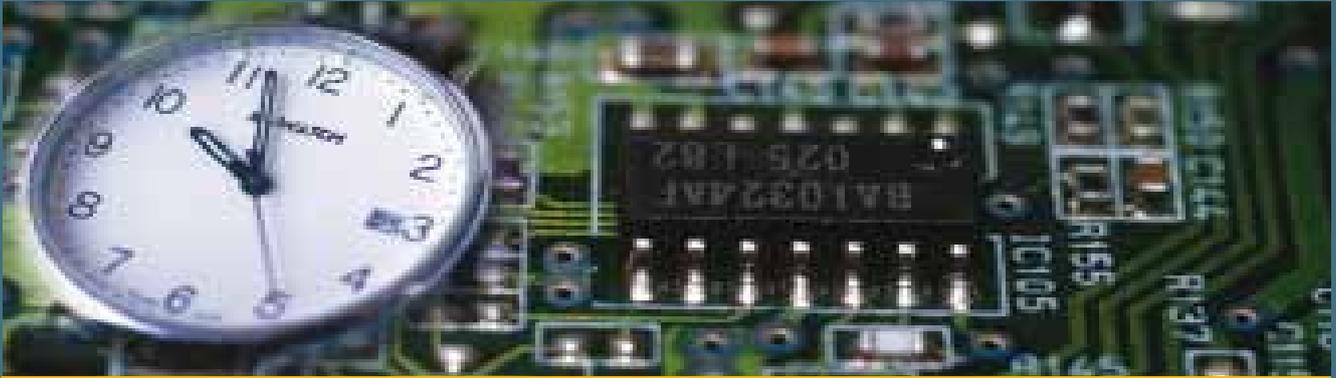
Whilst the board has enjoyed strong continuity with its representatives, it is also aware of striking a balance of allowing and encouraging succession. To demonstrate our commitment, we will be issuing a paper on Board Terms of Office which will detail the range of measures shortly to be adopted within LINX.

The greatest thing you can do for your organisation is to constructively criticise, support and feedback your thoughts on its operations to ensure that it continues to provide the services you need. We continue to be delighted to be working with you in 2009.

I commend the report to you all.

Grahame Davies
May 2009

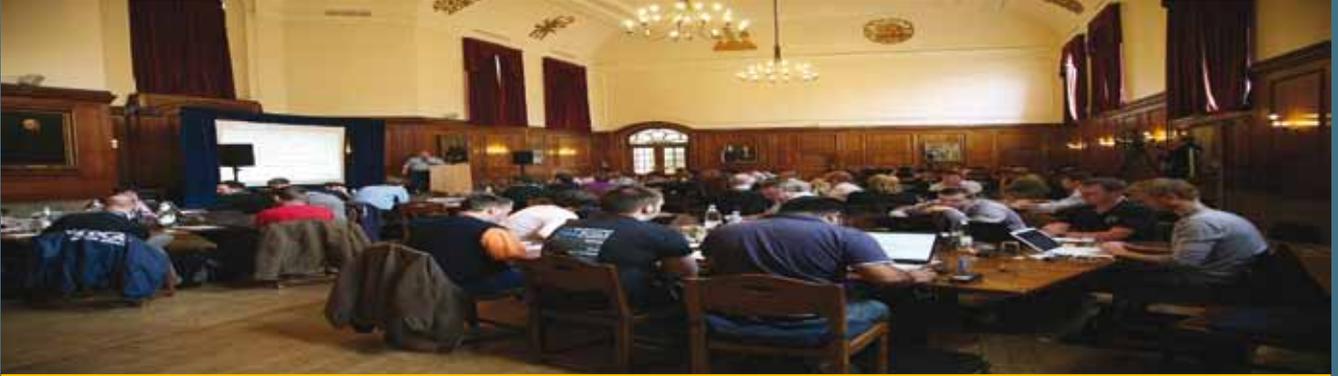




The year 2008 was a great year for LINX and our most successful one ever.

Highlights

- We reached the 300 member milestone, the first Internet exchange in the world to achieve this on a single public peering LAN;
- 53 new membership applications were received during the year – an average of one new member per week and a real sign of growing confidence in LINX and its membership;
- Our public exchange traffic reached a new milestone of a 400Gb/sec peak, which – when added to our considerable managed private interconnect traffic – adds up to a combined total of over 600Gb/sec at peak. Added to this we have almost 2Tb of connected capacity to the exchange and associated private interconnect service;
- We successfully opened three new points of presence (PoPs) in and around London, adding to the seven existing ones in the Docklands area. These new PoPs, which included a renewed relationship with Interxion at their city site, a new Telecity site in NW London, and a brand new relationship with Equinix at their Slough site, considerably enhanced LINX's geographic reach, and broadened the choice of colocation availability for our members. LINX's dark fibre network now extends diversely from London Docklands to Slough;
- Seven new staff joined during the year, and virtually all our departments were strengthened as a result;
- On a variety of issues, from core network security to network filtering and copyright enforcement, we have been at the forefront of discussions between industry and government. Our efforts at a European level and in the global Internet governance arena have been increasingly widely recognised, and we have extended our capability to support enquiries on policy issues from members, with the recruitment of a dedicated Membership Relations Officer;
- We yielded sufficient surplus to enable us to further reduce our prices: 10% across the board and a further 25% on our second peering LAN;
- LINX's end-of-year surplus exceeded £900,000, all of which will be invested back into the business to further develop our network, services and support for members.



Membership

Membership grew from 280 to 317 during the year; a net growth of 37, actually representing 52 new members – once member consolidations (and a small number of cancellations) are taken into account. We also established new memberships in five new countries: Cyprus, Czech Republic, Kenya, Qatar and Thailand – extending our global reach even further:

Connected member capacity on our public peering platforms rose by 54% to 1.80Tbps.

LINX Membership Commitment

As a mutual organisation, LINX believes it should have an open and transparent relationship with its members. To improve this, we completely revised the Memorandum of Understanding which is our “contract of membership”. Our goal was to bring it up to date and, wherever possible, make it easy to understand and completely fair to all parties. Through a process of consultation at LINX’s quarterly meetings, this was achieved and the new version adopted at LINX64 in February 2009. One new member gave the new version the ultimate accolade of being a document their legal team could not fault.

Growth

There were 629 member ports on the exchange at the end of the year. The most significant change was the growth in the number of 10GigE ports from 86 to 150. 100Mb and 1GigE member ports numbers stayed fairly constant, with new ports being offset by upgrades to higher capacity ports.

All these numbers paint a picture of an exchange in excellent health; growing and thereby enhancing its value to existing members. We firmly believe that more members, especially those of diverse types and/or from diverse geographic regions, bring a broader range of Internet routes within the scope of peering arrangements. LINX’s policy of continuing to cut prices has made it more attractive to a wider range of businesses and organisations of all types. This has resulted in excellent growth in 2008 and is expected to bring significant benefits in 2009.

Managing Performance

The biggest challenge that we overcame in 2008 was in resolving a period of severe network instability in late spring / early summer, resulting from hardware and software issues in our large array of switching equipment. LINX recognises that the network instability experienced last year was very testing for our members, as well as for our own workforce.

Our 2008 member survey, conducted later in 2008, revealed a very high level of understanding and confidence within our member community, reinforced when LINX was ranked highest within a member survey comparing engineering competence across competitive Internet exchanges. This is extremely gratifying and is testimony to the tireless commitment of our engineering team, the help of our technical suppliers and the way that our entire organisation pulled together to resolve our issues.

Happily, the latter half of the year also saw the exchange return to the previously acceptable levels of performance and stability – despite the huge amount of engineering work undertaken to increase both the capacity and geographic reach of the networks.

The initiative to extend LINX’s PoPs occupied a significant proportion of our efforts during 2008. We owe a huge debt of gratitude to one of our non-executive Board members, who agreed to project manage this enormous endeavour.

Comment

"As we continue to attract customers who look to place their equipment at the heart of the Internet the LINX partnership will become increasingly important. LINX will allow our customers to gain greater control of their network traffic by giving them the choice to peer directly to the LINX exchange at the Interxion London City site, in combination with the highest standards of resilience and availability and access to high density power."



Greg McCulloch,
Managing Director, Interxion UK

As well as acquiring and installing new switches, and the associated inter switch link DWDM equipment, we also went out to tender and acquired a significant amount of new dark fibre links – to enable all the new sites to be resiliently connected to our existing Docklands based PoPs. This maintains our policy of enabling members to connect to any of our PoPs, wherever is convenient geographically and economically for their network, and still have the potential to peer with all of the other connected networks.

Comment



"Geo is delighted to have enabled LINX's network expansion with a diverse optical fibre ring connecting their Docklands sites with three new data centres. These connections will not only allow existing members to build and expand their networks in London, but will facilitate new entrants into the market and encourage new members to benefit from excellent peering connectivity."

Chris Smedley,
Chief Executive, Geo Networks

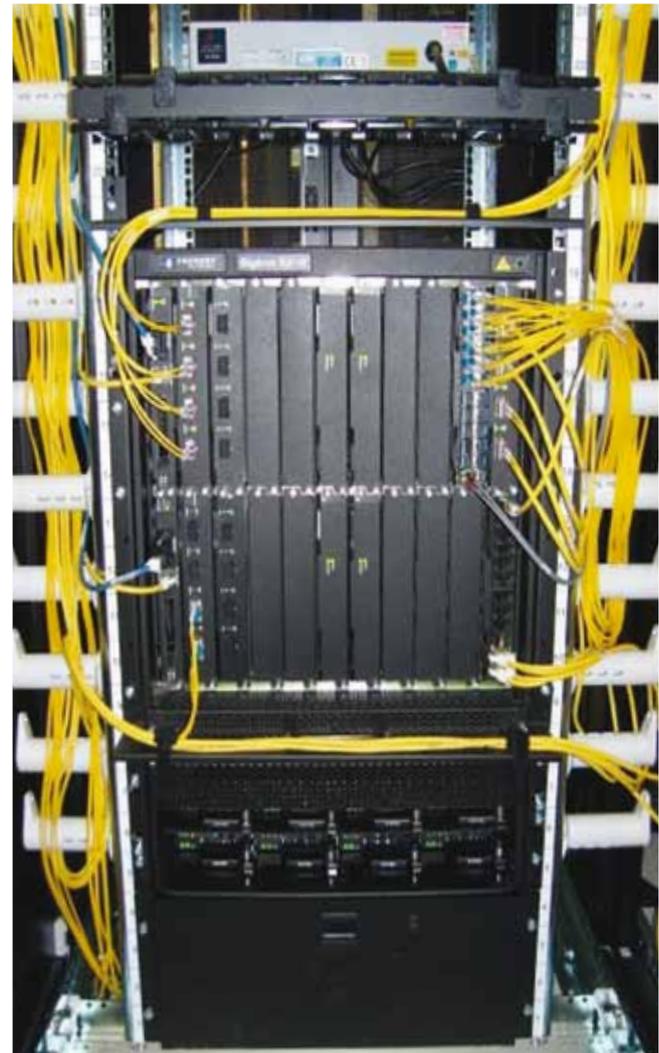
Comment



"Network peering continues to be the primary method for data transfer between the world's networks, providing the foundation for the efficient flow of Internet traffic,

from email to video. Partnering with Internet exchanges like LINX, who have an existing critical mass of quality ISPs and connected parties operating within their network, is an important element of our global service offering, providing customers with the highest-performance platforms for exchanging Internet traffic."

Eric Schwartz,
President of Equinix Europe



Comment

"As the demand for online content and services continues to grow exponentially, investment in critical infrastructure is vital if we're to keep London at the very heart of the global Internet economy. I'm delighted TeletyGroup and LINX, who have worked together very successfully over many years, are once again leading the way by delivering new capacity and connectivity where it is most needed to provide new opportunities for growth."



Adriaan Oosthoek,
Managing Director, TeletyGroup UK and Ireland



Outreach Meeting, Onchan, Isle of Man, July 2008

As ever, LINX was very active at external events during 2008.

European Peering Forum 3

LINX took the role of lead host for this highly successful forum held in Dublin. We were joined by our co-host IXPs and 170 of the leading peering coordinators from the region. Over the course of the two day agenda the attendees saw presentations covering a broad range of topics including Submarine Cabling and Video Content Distribution. We look forward to an expanded EPF4 in 2009 where the hosts will be joined and led by Netnod.

Global Peering Forum

The GPF3 event took place in Fort Lauderdale where LINX, along with the host consortia, staged a four day event attracting an audience of 200 industry delegates. The Forum moved to Los Angeles for the GPF3.5 event where the evening session held during NANOG proved very attractive with great networking opportunities.

MENOG

Following on from the initial success in 2007, LINX continued to show strong support for the developing network community in the Middle East, focusing attention on Middle East Network Operator Group conferences. The company sponsored both MENOG3 in Kuwait and the combined RIPE/MENOG event in Dubai.

Outreach meetings

A new initiative was launched to bring LINX meetings to members who would not normally have the opportunity to attend. The first of these was held in Sheffield attracting both local members and prospects, several of whom had not been to a LINX meeting before, or not for many years. This was followed by a meeting in the Isle of Man which gave us a chance to meet six members that had never attended a LINX meeting. This had the great benefit of bringing together the networking community on the island.

Euro IX

As one of its founder members, LINX continues to play a very active part in Euro IX, the trade association of European Internet exchanges. During 2008, LINX was well represented at the two highly successful Euro IX forum events, which took place in Stockholm and Geneva. LINX gave presentations on our new PoP developments, and also about the commercial aspects of running our exchange; Malcolm Huddy, LINX's Head of Public Affairs, also gave updates on European regulatory affairs.

Sales and Marketing

For the second year running turnover of LINX member ports exceeded 50% keeping the team busy with new orders and upgrades. We received 29 international applications (55% of the annual total) from 18 countries. These included some well known global brands such as Facebook, Lastminute.com, Nokia and T-Mobile. Our strongest international growth came from the USA with 8 applications.

HotLINX

HotLINX received a very successful redesign and has expanded both in content and scale. This has allowed us to drive up distribution numbers both in print and online allowing us to reach a larger audience and serve them with more varied coverage.



Chief Executive



John Souter
Chief Executive Officer



Ann Hawkins
Executive Assistant

I.T.



Hugh Spencer
I.T. Manager

Engineering



Mike Hughes
Chief Technical Officer



Pui Hang Miles
Engineering Support

Sales & Marketing



Richard Yule
Sales & Marketing Manager



Jeremy Orbell
Marketing & Communications



Bernd Marienfeldt
Security Officer



Owen Conway
Network Architect



Mo Shivji
Senior Network Engineer



Jennifer Atherton
Business Development Executive



Sol Pearmain
Business Development Trainee



Paul Daukas
Data Systems Designer
and Administrator



Chris Hobden
Toolmaker



Andre Els
Senior Network Engineer

Operations



Neena Singh
Marketing & Human Resources



Tony Vroon
UNIX Systems Admin and
Gentoo Server Developer



Gary King
Network Engineer



Anne Bates
Network Engineer



Howard Fisher
Chief Operating Officer



Michael Lewis
Management Accountant



Steve Harrison
UNIX and Web Sysadmin



Neil Ratcliffe
Service Delivery Engineer



Alan Farrell
Network Engineer

Public Affairs



Malcolm Huty
Head of Public Affairs



Christos Kaitatzis
Member Relations Officer



Josh Wright
I.T. Support Trainee



Martyn Ranger
Service Delivery Engineer

Technology



Chris Fletcher
Technology Development

AEG
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www.aegworldwide.co.uk



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www.jerseytelecom.com



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www.qtel.com.qa



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Kabel Deutschland
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www.pokerstars.com



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www.afilias.info



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Luxembourg
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www.securahosting.com



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Lixxus
United Kingdom
www.lixxus.co.uk



Stealth Communications
USA
www.stealth.net



Cobweb
United Kingdom
www.cobweb.com



Naukanet
Russia
www.naukanet.ru



Switch Media
United Kingdom
www.switchmedia.co.uk



Dial Telecom
Czech Republic
www.dialtelecom.cz



NEOTelecom
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USA
www.hgtn.net



Panther Express
United States
www.pantherexpress.net



These are the new members connected during 2008. It includes a number of new territories thus expanding the global reach of the LINX network ever wider: