

LONDON METROPOLITAN NETWORK

2003/2004 has been a very good year for LMN. The network itself has continued to operate smoothly providing a reliable and high performance service to our members. We have started a bandwidth upgrade for all FE Colleges and have provided a second connection to SuperJANET to further increase reliability.

The major achievement of this year has been the successful development and introduction of two new services in collaboration with commercial partners. The online offsite backup service and email filtering services take advantage of aggregation of demand and the underlying network to deliver excellent value to LMN members.



Professor Rick Trainor
Chair of LMN Board
Principal, King's College London

This report is written for the LMN Annual General Meeting in January 2005. Formally, it covers the financial year 1 August 2003 to 31 July 2004, but includes developments up to the end of 2004 where appropriate.

About LMN

LMN is broadband Metropolitan Area Network (MAN) connecting over 100 Higher Education Institutions and Further Education Colleges to JANET (The UK's academic network) and the internet at speeds up to 1Gbps.

However, LMN is much more than a physical network, it's a junction of knowledge, which brings London's often disparate academic world together. Our member organisations own the network and elect our directors, helping to run it as a non-profit organisation serving the whole of the Greater London region, on behalf of over a million staff and students.

LMN is a mature network which has been providing connectivity in London for many years and we are now developing new services for our members and expanding the community to include other related organisations.

During the year, LMN agreed the following mission:

London Metropolitan Network Ltd operates a mature yet state of the art multi-service network for the education and research community of Greater London. We will continue to expand our community and develop new services.

LMN's aims

- *To provide a high performance and resilient network infrastructure enabling connectivity within the LMN community and onwards to JANET and the global Internet*
- *To develop a range of services to meet the members' needs and aspirations*
- *To develop commercial partnerships to enhance the provision of LMN services*
- *To continually improve the quality and cost effectiveness of LMN services*
- *To be a focus and facilitator for collaborative initiatives within the LMN community*
- *To expand LMN to include the wider community in Greater London and beyond*
- *To play a pro-active role in the wider regional economy by being a leading provider of knowledge based services*

Community and People

During the formal period of this report the Directors of LMN were:

Prof. Rick Trainor Chair

Principal, King's College London

John Stone Vice Chair

Principal, Ealing, Hammersmith & West London College

Phil Harding Company Secretary

Director of Finance, University of Westminster

Prof. Roland Rosner Chair of Technical Group

Director of Education & Information Support, University College London

Jean Sykes Chair of Business Development Group

Librarian & Director of Information Services, London School of Economics & Political Science

Russell Altendorff

Director, Information Services Division, London Business School

Ed Carter

Business Manager, Yorkshire & Humberside MAN

Maggie Knights

Vice Principal, Information, Learning and Human Resources, Greenwich Community College

Mick Kahn

Executive Director, London Metropolitan Network

On 1 September 2004, **Roland Rosner** stepped down as Chair of the Technical Group and **John Robinson**, Head of ICT, University of Greenwich was co-opted to the Board to take over this position.

LMN staff were:

Mick Kahn Executive Director

Mahmood Javaid Business Development Manager

Pete White Operations Manager

Member organisations (as at 01/08/04)

Barnet College
Bexley College
Birkbeck University of London
Brunel University
Carshalton College
City and Islington College
City of Westminster College
City University
The College of North West London
Coulson College
Courtauld Institute of Art
Ealing, Hammersmith & West London College
Goldsmiths College, University of London
Hackney Community College
Harrow College
Havering College of Further & Higher Education
Havering Sixth Form College
Imperial College London
Institute of Cancer Research
Institute of Education, University of London
Kensington & Chelsea College
King's College London
Kingston College
Kingston University
Lambeth College
Lewisham College
London Business School
London Metropolitan University
London School of Economics and Political Science
London School of Hygiene and Tropical Medicine
London South Bank University
Merton College
Middlesex University
Newham College of Further Education
Newham Sixth Form College
Queen Mary, University of London
Ravensbourne College of Design and Communication
Richmond Adult Community College
Richmond Upon Thames College
Royal Academy of Music
Royal College of Art
Royal College of Music
Royal College of Nursing Institute
Royal Holloway, University of London
Royal Veterinary College
School of Oriental and African Studies
South Thames College
Southwark College
St George's Hospital Medical School
St Mary's College
St. Francis Xavier College
Thames Valley University
The College of North East London
The Working Mens College
Trinity College of Music
University College London
University of East London
University of Greenwich
University of London
University of Surrey Roehampton
University of the Arts London
University of Westminster
Uxbridge College
Waltham Forest College
West Thames College
Wimbledon School of Art

The Network

LMN is a highly reliable network. During 2003/2004, the overall availability was 99.98% and the failure rate 0.05 per 1000 connection hours, easily meeting the targets of the RPAN contract with UKERNA. Over the year there were seven months with 100% availability. Usage continues to grow with the traffic from JANET to LMN now peaking at over 1Gbps, with the larger HEIs consistently peaking at over 100Mbps.

The telecommunications infrastructure provided by Thus has continued to operate well and there have been no major incidents. The improvement plan agreed in the previous year has had a positive effect on fault resolution, returning repair times to an acceptable level.

The day to day operation of the network by Logicalis has worked effectively, with smooth communications with our members and Thus. LMN is very pleased with the combination of professional approach and flexibility shown by Logicalis.

The major network development of the year has been the installation of second link to SuperJANET between the LMN PoP at Imperial College London and the SuperJANET node at Telehouse. This significantly increases the reliability for those institutions that invested in a second connection to LMN in the previous year, by eliminating further single points of failure.

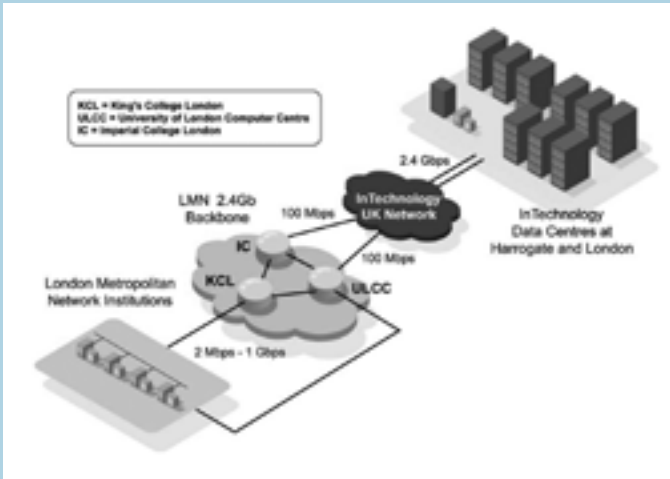
A number of FE Colleges have upgraded their circuits and the programme of connecting Local Authorities for the support of Adult and Community Learning has begun. Two external organisations, the Multiple Sclerosis Society and the Royal London School for the Blind have been connected to LMN along with a connection to a commercial ISP.

In the second half of 2004, the Learning and Skills Council announced an upgrade of all FE Colleges to at least 4Mbps. Taking advantage of its cost effective telecommunications contract, LMN has been able to provide a physical 10Mbps to all FECs, providing additional bandwidth now and a good path for future upgrades.

The Technical Group, Chaired by Roland Rosner, and later John Robinson, oversaw the operation and development of the network throughout the year.

New Services

Online offsite backup



Normally, InTechnology would deliver the service directly to customers, and each institution would have to fund a dedicated connection between their site and the InTechnology backbone, which could represent up to a third of the total cost of the service.

LMN has installed a 1Gbps direct connection between the LMN network and the InTechnology backbone. Because of demand for the service LMN is already planning a second link to provide more bandwidth and resilience. These interlinks enable LMN members to use their existing connection for the backup service, thereby saving the substantial dedicated connection cost. In addition to this LMN has negotiated an aggregated price and has further discounted the cost of the service for its members

An online offsite backup and restore service is the first value added service developed by LMN.

This service has been developed in response to a survey carried out within the LMN community which revealed that the most pressing requirement was for an offsite data backup and recovery solution, offering good value for money, delivered under a service level agreement and operating over existing LMN links.

This initiative has been developed in partnership with InTechnology plc (www.intechnology.co.uk) who are a leading provider of such a service.

An extensive three month pilot was carried out with London Business School and Birkbeck College. The pilot met all of the rigorous success criteria and the service launched to LMN members. Seven sites have already taken up the service.

Online offsite backup Case Study Birkbeck College

Birkbeck College joined the LMN backup pilot because it's existing onsite backup systems were reaching capacity and an increasing amount of staff time was going into managing backups. In addition the college needed offsite storage for business continuity. The LMN/InTechnology solution met all its needs and provides a more stable platform for future development. Dr Jasbir Gill, Director of Central Computing Services says ***"This service has provided more flexibility and peace mind and has allowed my technical staff to concentrate on interesting work"***.

Email filtering

LMN has formed a partnership with MessageLabs a well established provider of managed email security services. This partnership enables our community to benefit collectively from a significantly discounted price. LMN believes this to be the best academic price that is available in the UK. With mail filtering handled by MessageLabs, staff at LMN members are freed up to focus on IT services more directly supporting learning, teaching and research.

Eleven sites have already taken up the service.

Email Filtering Case study Tower Hamlets College

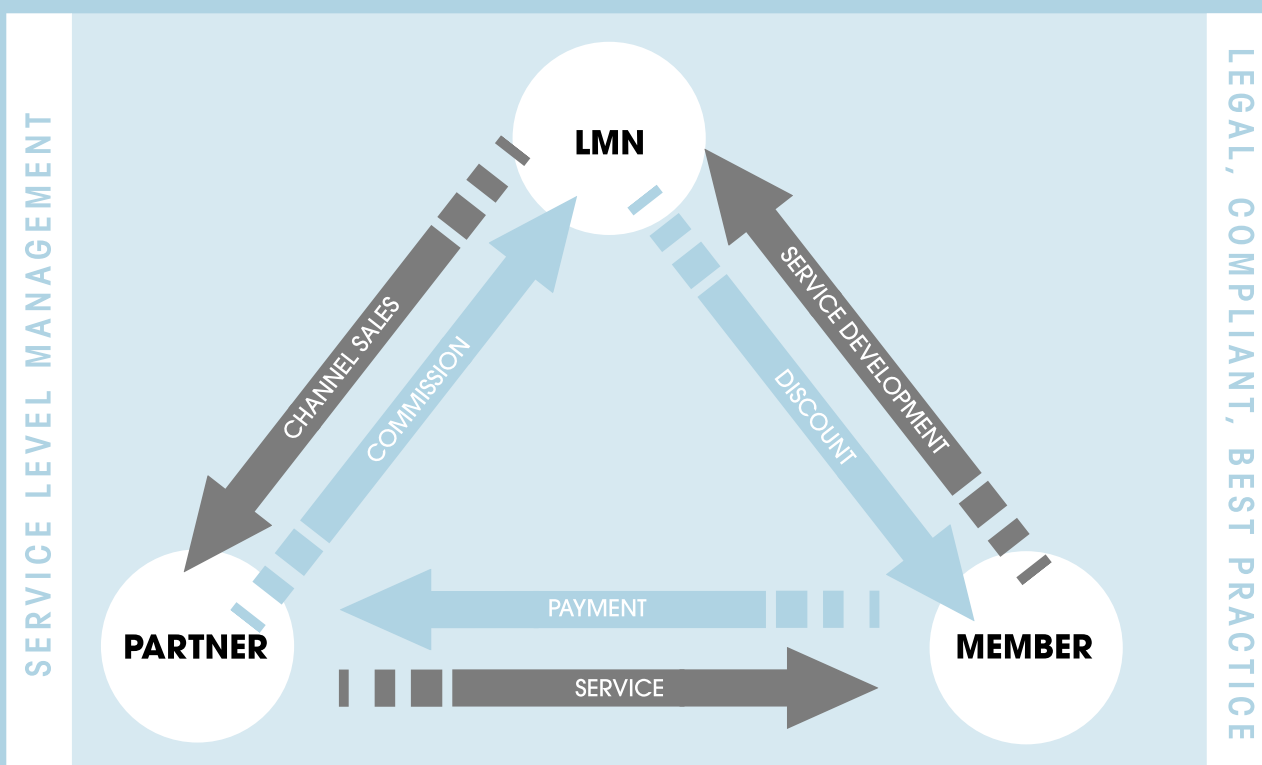
Tower Hamlets College decided that they needed an email filtering solution when they were hit by the Love Bug virus in May 2000. They soon identified Message Labs as the best solution, but the college could only afford to filter staff email initially. The LMN deal has allowed them to filter students email as well and they now get no virus infections at all. Nick Clark, Director of IT Services says ***"I am very pleased with the service. Its one less thing to worry about"***

Service Development

During the year, the LMN Business Development Group has established models for service development and service delivery which have proved to be very successful.

When a potential service has been identified, LMN has established a pilot, managed by a steering group with members from the Business Development and Technical Groups, LMN's commercial partners and participating pilot members. Project plans are produced and each pilot institution and LMN defines success criteria. Rigorous testing and acceptance plans are developed along with model contracts, all of which can be used by other LMN members greatly reducing implementation effort and keeping down costs.

The service delivery model involves a triangular relationship between LMN, the member and the commercial partner, bringing mutual benefit on each side of the triangle. The partner provides a service to the member in return for a payment. LMN acts a channel sales partner for the partner in return for a commission. LMN passes back a discount to the member and enables input from the members into service development. LMN acts as the overall manager of the relationship, whilst leaving the prime service delivery relationship with the LMN member.



Financial Report

Profit and loss account for the year ended 31 July 2004

	2004 £000	2003 £000
Turnover	1,985	2,025
Cost of Sales	(1,708)	(1,817)
Gross Profit	277	208
Administration Expenses	(246)	(212)
Operating Profit/(Loss)	30	(4)
Interest Receivable and Similar Income	4	2
Profit/(Loss) on Ordinary Activities before taxation	34	(1)
Tax on Profit on Ordinary Activities	-	-
Retained Profit/(Loss) for the Financial Period	34	(1)
Retained Profit Brought Forward	113	115
Retained Profit Carried Forward	148	113

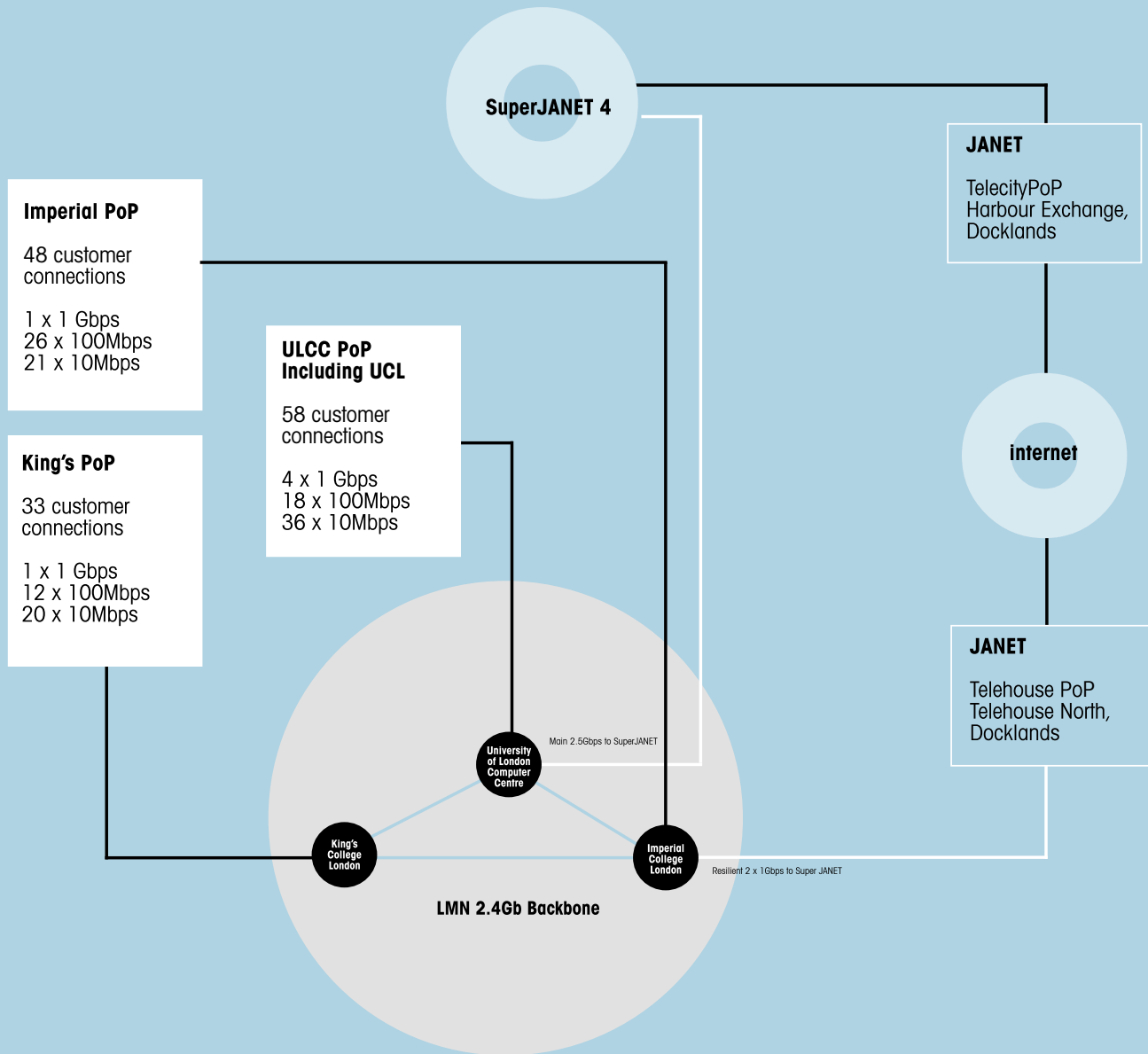
There were no recognised gains or losses other than those shown above. Therefore no separate Statement of Total Recognised Gains and Losses is produced. All activities reflected above represent continuing operations.

Balance sheet as at 31 July 2004

	£000	2004 £000	£000	2003 £000
Fixed Assets				
Computer Equipment		-		92
Current Assets				
Debtors	710		654	
Cash at Bank and in Hand	453		94	
	1,163		749	
Creditors : Amounts falling due within one year	(471)		(343)	
Net Current Assets		691		405
		(543)		(383)
Total Assets Less Liabilities		148		113
Reserves				
Profit and Loss Account		148		113
Total Funds		148		113

These Financial Statements were approved by the Board of Directors on 21st December 2004. A full set of audited accounts is available on the LMN web site.

LONDON METROPOLITAN NETWORK



Partnerships

LMN's principal partners during the year have been:

Thus plc

<http://www.thus.net>

Telecommunications
infrastructure provision

Logicalis UK Ltd

<http://www.logicalis.com>

Network operation
and equipment
maintenance

InTechnology plc

<http://www.intechnology.co.uk>

Network backup
and restore service

Message Labs

<http://www.messagelabs.com>

Email filtering

For further information about LMN
see www.lmn.net.uk or contact info@lmn.net.uk.