Reports from Regional Networks for UKMMG Meeting of

9 October 2006

LMN: Pete White

1. LMN Office and PoP move

University of London is disposing of LMN's main PoP site at Guilford Street and LMN has to vacate theses premises by the end of 2006.

LMN has relocated the main PoP from Guilford Street to Stewart House, Russell Square. There are 12 remaining tail circuits to shift, however the majority of these are resilient. The move is being overseen by the LMN technical group, and also a special project team, which apart from LMN is comprised of:

- Thus – managing the core and tail circuit shifts
- Logicalis – managing the routing requirements
- ULCC – managing the PoP sites and rerouting of the SJ4 link
- UCL – representing the Bloomsbury cloud of institutions and the LMN Technical Group

2. SJ5 and the procurement of LMN 3

LMN has upgraded the core routing equipment (GSR12000) in readiness to receive SJ5 at 10Gbps which is now due to be installed in November 2006. LMN would like to use load balancing on the two SJ5 connections to ensure both links are available and active as well as to relieve the load on the core network.
LMN's Technical Group has formed a procurement subgroup to manage the production of documentation and the day to day procurement issues with LMN3.
LMN has launched the restricted procurement of the next generation network LMN3 (this procurement is for our core and HE circuits only – the FE and other circuits will be procured under CATALIST as a mini procurement). The indicative timetable for the main restricted procurement is below.

Activity	Date
Insert notice of procurement launch in the EU journal	Monday 21st August 2006
Suppliers' briefing meeting	Wednesday, 6th September 2006
Close of registration to take part in the procurement process	12.10pm GMT+1 on Monday, 25th September 2006
Last opportunity to issue questions for clarification	12.10pm GMT + 1 on Thursday, 28th September 2006
Prequalification questionnaire returns	12.10pm GMT+1 on Monday, 2nd October 2006
Complete review of responses and shortlist suppliers to enter the procurement process	Monday, 16th October 2006
Issue the LMN3 Invitation to Tender to shortlisted suppliers	Wednesday 18th October 2006

Closing date for receipt of tenders	12.10pm GMT on Monday 4th December 2006
Selection of preferred supplier	Wednesday 17th January 2007
Contract placed with the preferred supplier	Monday 19th February 2007
Target date for LMN3 operational service	End June 2007

3. Upgrades and additions to LMN
LMN has now funded the upgrade of all our 38 FECs to a full10Mbps and this programme is now complete. We are continuing to connect the Adult and Community Learning Colleges as required by UKERNA and have completed 14 with 6 more on order. LMNss total number of connections is now 149 at the time of writing.

4. Services Development
LMN continues to develop of range of added value services for our community which have had a good take up by member institutions.

LMN now save our community over £750,000 per annum on our InTechnology range of off-site back up, email archive and web file storage.

We continue to develop our email filtering through message labs and 24 x 7 network services through Logicalis.

We also have some new services in the early development stages (halls of residence managed services etc).

WNL (running the SWMAN and LLNW): Roger Williams
The SWMAN backbone has now been fully migrated over to the LLNW with all SWMAN PoP routers now talking directly to the adjacent LLNW router. Our separate SWMAN backbone has been cancelled.

With the delays to the SJ5 timetable, we have arranged to increase our SJ4 links between the BAR and the LLNW to 2 x 1Gbps. This is to cope with the increased term time traffic from the LLNW and SWMAN, all of which now enters JANET via the LLNW.

UKERNA seem to be happy with Verizon's work in our two RNEPs. The snagging check went well with only one defect found (missing fire seal).

The GSR router we need for RNEP2 has been kindly donated by UKERNA. It is currently being MOT'd and configured by LOGICALIS (who provide the LLNW). We are still waiting for BT to lay the LLNW link between the two RNEPs.

Our microwave links to our three organisations in the wilds of West Wales are being re-organised. Two of them now use BT LES100 circuits to their nearest local authority access point on the LLNW. The third wil stay as microwave but will have the number of hops reduced to improve reliability.

Planning for the proposed All Wales Public Sector Network (which would include LLNW, SWMAN, NWMAN and the Health sector) continues. The EJ notice has been placed, a longlist of suppliers has been selected following a PQQ exercise and these have been invited to respond to an Output Based Specification. A shortlist of suppliers will then be selected to enter a Competitive Dialogue phase, with a target award-of-contract date of next April.

MidMAN: James Hendry

MidMAN REPLACEMENT / REPROCUREMENT

The MidMAN due diligence exercise is now finished, but did not reach a satisfactory conclusion. Throughout UKERNA has been kept informed of status and progress of the discussion with WMNC Ltd. MidMAN has entered into a one year contract extension with WMNC Ltd.

With the conclusion of the due diligence exercise above, MidMAN is in the initial stages of planning it reprocurement. This activity will be carried out in conjunction with UKERNA (and possibly others) in order to attempt to maintain a true regional perspective to the procurement outcome. The procurement will be conducted within the spirit of RPAN3 (although obviously the detail is not yet available).

SuperJANET5

As far as is known, all SuperJANET5 preparatory installation work (e.g. RNEP sign off, POS interfaces installed, Netsight moved) has now been completed within MidMAN. While recognising that SuperJANET5 is a large and complex project, MidMAN has been somewhat disappointed with the overall project arrangements. Typically very little notice is given when RNO effort is required.

DISASTER RECOVERY PLANNING

In the context of Collaborative DRP a well attended ‘best’ practice meeting of MidMAN HEIs was held in July 2006 (and focussed on sharing at a high level the content of each HEI’s DRP). The next ‘best practice’ meeting is in October 2006 (and will focus on resource sharing).

GOVERNANCE

MidMAN Governance activity continues. In the immediate future MidMAN will continue as a consortium and work is underway to update the associated MoA between the lead site and members of the consortium.

TECHNICAL CO-ORDINATOR

The MidMAN Technical Co-ordinator resigned wef 31 July 2006. MidMAN is considering the ‘best’ way to progress a replacement (and this may not necessarily

be by direct replacement but may be by defining and placing manageable tranches of work with an HEI or other third party).

NWMAN: David Stedham

We have signed a contract with Logicalis to provide router enhancements, BT lines and project management to allow us to decommission our fibre/microwave backbone and migrate onto the Lifelong Learning Network for Wales. This we hope to do before the end of 2006, although there are delivery problems with some BT links to overcome first.

A consequence of connecting to LLN is that our JANET traffic will use the Cardiff RNEPs instead of the Wrexham BAR, allowing the 155M link from Warrington to be removed at the end of SJ4.

NorMAN: Jason Bain

The main activity for the team has been the NorMAN-IV project, funded from HEFCE, RPAN and NorMAN Consortium funds. This includes:

* New core routers (Cisco 7600s) at both RNEPs;

* A new PoP in the south of the region;

* Additional gigabit Ethernet circuits, most from RNEP2 to HEIs;

* 2nd entry points at each HEI;

* A new routing topology with IS-IS/BGP4 in the core, with MPLS utilised to provide some layer-2 services for HEIs as well as SJ5 managed bandwidth services in the future.

* Deployment of ADVA CWDM equipment on Tyneside to make better use of a fibre pair between RNEPs.

* NorMAN will join SuperJANET5 with a native IPv6 backbone, although currently only one customer is interested in using it.

The aim of all of this work is to deploy a more resilient service, capable of delivering some managed bandwidth services in a region that is "fibre-challenged".

It hasn't been an easy project to manage, with delays from all suppliers (both telco circuits and routers): my usual planning fudge-factor to cope with the inability of our suppliers to deliver on time needs substantial revision. Most FE colleges and one HEI have already been successfully migrated, with project completion due by the end of the year.

Although the SuperJANET5 installation on Tyneside didn't start well, I'm pleased to say that both RNEPs have been ready for service for some weeks. We're keen to get the circuits connected to the PoS cards in the core Cisco 7600s so we can start testing in advance of migration.

SWERN: Kit Powell & Andy Mason

There have been further problems with Verizon and its sub-contractors installing the SJ5 collector arc.

Our staff are making good progress with rebuilding the entire regional backbone using new circuits and a resilient loop architecture. Our telcos are having the usual problems with delivery of BT circuits to connect our PoPs to their infrastructures, and we are having to extend existing circuit contracts. We have commissioned work to re-route one of our inter-RNEP circuits to eliminate routing commonality with the SJ5 collector arc.

Malicious damage to two telco fibre cables, in different locations, took both our circuits to Cheltenham out of service for 10 hours on Sunday 25 June. The new backbone should provide some measure of protection against incidents of this sort, as the two backhauls from each city are from different telcos.

SWERN has taken over the licences of five Sponsored Connections from the University of Bristol.

EMMAN: Ian Griffiths

The main activity for the MAN has been the implementation of the local SJ5 project. Ciena (WDM) equipment is being installed at each of the nodes. This work is planned to be completed prior to the connection to the SJ5 backbone in late November. Progress has been slow primarily to the lack of Ciena engineers in Europe.

Both the 2 RNEPs are at new locations and these have both been installed successfully.

The MAN has installed network anomaly detection software and a number of the Universities in the region are linking to this central provision.

A Commercial Manager has been appointed and contracted to July 2007 with a view to investigating and implementing connection and service to other primarily public institutions.

A flexible commercial internet link has been tended for and is due for installation in January 2007.

A site resilience project is underway and will result in each University having connection to 2 different locations on their own site.

The final microwave link run by EMMAN is about to be cancelled. New connections include one to the National Space Centre.

NWNW: Tim Robinson

RPAN Funded Connections

As of 01-Oct-2006 NNW has reached 99 RPAN funded connections with number 100 on order. During the last year 13 new sites have been connected (ACL and WEA) and 49 FE Colleges upgraded.

Having completed the FE Upgrade project FE sites are already requesting 100 Mbps links in order to be able to accommodate higher JANET bandwidths. The first of these is on order.

Telco Mergers

The number of telcos NNW deals with has been reduced from four to two with the merger of NTL and Telewest and the takeover of Your Communications by Thus.

RPAN 2.5

NNW has signed the RPAN 2.5 contract.

RPAN 3

The Board of NNW has written to UKERNA accepting the Principles of the RPAN 3 contract.

SuperJANET5

NNW is in the process of upgrading its entire core with eleven new Cisco 6500s being deployed across the region. At the same time we are deploying dark fibre to allow an e-Science network to operate between Manchester, Liverpool, Daresbury and Jodrell Bank.

NNW's two RNEPs in Manchester and Preston are ready to connect to SJ5. We are however slightly concerned at the limited amount of testing time we are likely to get as UKERNA sort out the problems with the core and collector arcs.