Minutes of the UK MANs meeting 27th September 1999.

1. ATTENDING

Robin Arak LeNSE Malcolm Bain **FaTMAN** North Wales MAN Phil Brady Ed Carter YHMAN Gill Chester UKERNA Bob Day **UKERNA** Barry Forde C&NLMAN David Harrison South Wales MAN Clare Hill **UKERNA** Kevin Hoadley **UKERNA** Philip Hobley YHMAN George Howat **EaStMAN** Ian Griffiths East Midlands MAN Mick Kahn London MAN (Secretary) Peter Kemp JCN Tim Kidd UKERNA John Linn AbMAN Linda McCormick ClydeNet John Marshall **SWAN** Pete Mills Net North West and GMING Kit Powell **BWEMAN** Carol Robinson **EastNET** Denis Russell **NorMAN** Ray Tier MidMAN **Roland Trice UKERNA** Peter Waller LeNSE

Apologies were received from:

Chris Cheney Dave Vinograd EastNET London MAN (Convenor)

Notes taken by Rolly Trice, Kevin Hoadley and Tim Kidd.

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2. OBJECTIVES.

Bob Day introduced the objectives of the meeting. The slides for Bob's presentation may be obtained from:

http://www.superjanet4.net/regionalisation/ukman27-09-99/background/index.htm

Bob explained that UKERNA intends to be much more open and informative about the SJ4 project than was the case with SJ III. Any information which does not need to be kept confidential as part of the tendering process, will be published.

The SJ4 mailing list will be used to announce changes to the SJ4 web page and to announce the publication of documents into the public domain.

Bob suggested that the UK MANs group could establish itself as the forum for discussion of operational issues, leading to the establishment of standard contracts for the delivery of JANET services by MANs. The JISC Working Group on MANs is concerned with general standards on MAN governance.

UKERNA wishes to establish a single class of contract (with individual schedules) to cover all MANs, rather than negotiate individual contracts with each MAN in turn.

It was pointed out that there are already contracts in place, between MANs and their suppliers, which may complicate the contracts and relations between the MANs, UKERNA and the JISC.

There is already interest from Local Education Authorities to connect schools to JANET. Additionally, the University for Industry, Regional Development Agencies etc, are expressing interest. It is too early to see exactly how far this will cause JANET to expand, but it is worth noting that there will be a three fold increase in the number of connected FE sites over the next 12-18 months.

Bob Day suggested that MANs, rather than UKERNA, could be made responsible for the procurement and management of links to FE colleges.

Bandwidth should not be considered a major criterion for connecting an institution to a MAN. What is important is that the services and support provided by the MAN should be consistent.

It is expected that existing FE consortia will remain in place. It is not expected that they will break up so that individual colleges join MANs. It is not clear if new FE institutions will form their own FE consortia or connect directly to existing MANs.

It is important to harmonise services. Currently there are variations based on geography and it is clear that an institution's location should not affect the services it can expect from the network.

3. OPERATIONAL GOALS.

Tim Kidd gave a presentation on the operational goals for SJ4. This presentation is available from

http://www.superjanet4.net/regionalisation/ukman27-09-99/service/index.htm.

Issues arising include:

3.1 Operational Standards.

Basic operational standards should be defined for every MAN. In addition, any added value services should also operate to defined standards, so that consistent provision is enabled across the MANs and the SJ4 backbone.

Connecting institutions may be customers of the MAN rather than full partners of the MAN consortium.

Current policy is pointing towards the use of MANs to connect individual institutions to JANET. This policy will affect the future procurement requirements for MANs.

Some standards for the connection of "sponsored" sites needs to be established, to maintain the quality of the JANET "brand". It may also be necessary to establish standards for connecting sites that use a MAN infrastructure but do not take JANET services.

The issue of institutions with multiple connections to a MAN needs looking at. Is it necessary to provide each connection with a uniform level of service, or does that uniform service level only applies to the JISC funded connection? There were distinct differences of opinion on this topic.

The establishment of minimum services and standards should not prevent MANs from offering additional services.

Questions were raised concerning the ability to fit the research community's requirements into a network where stability and high reliability are viewed as paramount. How would any virtual research network operated over the SJ4 backbone network, be rolled out into the existing MAN infrastructures.

3.2 Problem Management.

If a JANET wide central reporting service is established, it must be able to cope with reports from end users as well as network staff at institutions. While individual users ought to be encouraged to report problems to their local computing centre or MAN, there will be times where this is not possible.

Fault reporting contracts with suppliers need to be consistent. Institutions that are responsible for services must be able to report faults to the maintainers of these services. This comment arose from the problems experienced by Edinburgh University, trying to report a line fault on the Scottish MAN interconnect to Scottish Telecom. They were told that UKERNA, as the contract holder, are the only people who may report such faults.

3.3 Availability.

Many attendees believed that operation of a 7*24*365 fault reporting and fixing service will be very difficult to implement, due to the staff and maintenance costs. It was also suggested that a sufficiently resilient and reliable network will reduce the requirement for 7*24*365 cover, except for the network backbone.

3.4 Measurement.

It was agreed that "funding bodies" should be included in the list of bodies to be informed through network monitoring.

3.5 Funding.

Adequate funding is perceived as underpinning all the requirements for standard service levels, extended hours of staffed cover etc. It was felt very strongly, that the JISC/JCN will have to take responsibility for defining what service levels are affordable.

4. OPERATIONAL REQUIREMENTS AND STANDARDS

The meeting worked in two groups to consider:

- a) The evolution of SuperJANET
- b) Fault management on SuperJANET

The reports from the groups follow.

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raised that some of the MANs might not want to take on this burden. Bob Day suggested that there were two models for regional networks.

Those that were full partners in the delivery of JANET and which took on themselves the responsibility for the service, and those that provided a distribution infrastructure with the operational management and responsibility remaining with UKERNA. The London MAN is currently an example of the latter model.

The group discussed the benefits they saw in their own regional networks. The reasons expressed for building a regional network included the need to provision for connections to multiple campuses, the benefit of increased political "clout", especially for smaller institutions, and the opportunities the MANs provided to pursue regional agendas and funding.

Overall there was a strong feeling that regional networking was beneficial, moderated by a concern that the MANs might not be able to survive in their current form as "HE clubs". In particular, there was concern about the potential liabilities the institutions were taking on in leading a MAN.

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4.2 Group B: Fault Management

Convenor:	Ian Griffiths	(East Midlands MAN)
Rapporteur:	Tim Kidd	(UKERNA)

This group looked through the majority of the sections covering operational requirements and standards and made general comments about how they might be covered. This group discussed Kevin Hoadley's paper "Reporting Requirements For The JANET Connection Points" (ND/SJ/KH/DOC/002) and noted that they were keen to comment on this paper. *Members of the meeting were encouraged to send comments to Kevin by electronic mail as soon as possible.*

4.2.1 Central Fault Management and Network Monitoring

This was generally agreed with, with the comment that it was possible in principle but the information must be available to both MANs and UKERNA.

4.2.2 Monitoring and Fault Correction (for MANs and Backbone)

It was noted that the corrective action should be "initiated as *appropriate*" rather than "initiated as *necessary*".

There was a feeling that guidelines from UKERNA would be useful to ensure that everyone was clear *who* could be called out and *when*.

4.2.3 Problem Reporting and Handling (for Users)

The term "users" should be replaced with "sites" as this emphasised the responsibility of MANs to the institutes using their services. The sentence at the end of the first paragraph: "For consistent service provision to all users this must be available to all users in all institutes" should be removed.

It was agreed that problem reporting and handling were, for local users, handled by the MAN. There was general agreement that some MANs might find it useful to "buy in" support for handling fault reporting out of normal office hours.

The issue of hardware and software compatibility in systems for tracking problems was discussed. It was felt that it would be difficult to push people into using the same hardware and software. A central tracking system to hold problems may be useful.

4.2.4 Environment

It was felt important to consider the impact of some measures such as installation of UPS as these changes sometimes make the infrastructure less reliable. There may be a need to consider the requirement depending on the number of sites that are serviced from a particular point.

It may be useful to include requirements on disaster recovery plans.

4.2.5 Network Maintenance

There was some discussion around the exact timing for the at risk period. It was felt important to still have one, possibly with "normal completion by 09:00". There must be a facility for other changes and work on the network in times of emergency.

Discussions about the warning period before planned outages suggested that this should only apply to work carried out other than in the "at risk" period and that the exact warning period may depend on the nature of the work being undertaken.

4.2.6 Measurements

There was broad agreement with this section. We need to define exactly what we want to collect and why.

4.2.7 Protecting the Network

It was suggested that the opening sentence should read: 'MANs and UKERNA should work together to help sites to be protected from attacks and to improve their security." The original wording may imply some responsibility for sites' security.

It was noted that we have to ensure that we do not provide so much "security" that it is impossible to provide a useful service.

