



Procurement for Very High Bandwidth Global Internet Transit Service

Operational Requirement

This document and the information it contains are provided solely for the purpose of allowing potential suppliers to provide a tender for the services being procured. It is issued under the Open Procedure of the EU Services Directive.

Any supplier wishing to submit a proposal must register its intent with UKERNA before submitting the proposal. UKERNA will not accept proposals from suppliers who have not registered according to the procedure described in this document.

UKERNA will not accept any registration made after 25 May 2007.

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Authorised by:	Name: T Kidd	Signature:
	Position: Head of Operations	Date: 17 April 2007

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1. INTRODUCTION

This document comprises an *Operational Requirement (OR)* for a very high bandwidth global Internet transit service.

The procurement process will be managed according to the open procedure as specified by the European Procurement Services Directive, 2004/18/EC, and this document is an integral part of the procurement announced by UKERNA in the Supplement to the Official Journal of the European Union.

1.1 Contracting Authority

The contracting authority is the JNT Association, currently trading as the United Kingdom Education and Research Networking Association (UKERNA).

1.2 Scope of Contract

JANET currently interconnects and provides wide-area network services to all Higher Education Institutions, Further Education Colleges and Research Council establishments in the UK. Connections to other organisations, including those in both the public and commercial sectors, which work in collaboration with these bodies in the areas of education, training or research are also provided.

In addition, JANET provides wide-area backbone and associated national services to each of the Regional Broadband Consortia and to a number of Local Authorities, in the context of the schools' National Education Network in England. Similar services are currently provided to the Scottish Schools Digital Network in Scotland. JANET provides services as well to the Lifelong Learning Network in Wales and the Classroom 2000 network in Northern Ireland. JANET services are also provided to a number of Local Authorities, Local Education Authorities and Unitary Authorities to serve the needs of adult and continuing education, and for other activities of the Authorities which are of benefit to the public, primarily but not exclusively in the context of education and training.

The JANET Connection Policy defines the conditions under which organisations may be connected to JANET. The present connection policy is available at:

<http://www.ukerna.ac.uk/services/publications/policy/connection-policy.html>

The global Internet transit service to be procured will serve the needs of all classes of organisation and activity described in this Policy, and with the potential to serve other classes of public-sector organisation or activity that may be identified as a result of local, central or devolved government initiatives during the lifetime of the resulting contract.

1.3 Size and Duration of Contract

UKERNA is seeking an initial two-year contract term, with the possibility of extension for a further year. However, UKERNA wishes to conduct a price review on an annual basis. It requires the right to terminate the contract by giving the supplier 6 months' notice if in UKERNA's reasonable opinion an annual review proves the contract not to remain value for money. The standard form of contract issued as part of this invitation to tender contains this provision.

The predictions of transit bandwidth given in Section 2.2 of this OR as guidance to suppliers, and for the purpose of evaluating tenders, have been made on the assumption that enough bandwidth will be required to serve the evolving needs the following sectors.

1. The higher and further education and research and lifelong learning sectors across the whole of the UK.

2. The National Education Network within England. A “Proof of Concept” project is currently being run by Becta to determine the feasibility of aggregating demand for Internet transit from Regional Broadband Consortia and other users of the National Education Network, and in meeting this demand via JANET. This project will run until March 2008, at which time a decision will be made as to whether to continue with this demand aggregation on a permanent basis.
3. The Scottish Schools Digital Network within Scotland, over which will be delivered the “Glow” intranet. The Scottish Executive is currently determining the future of this facility, to replace the existing network in early 2008. It has indicated its interest in continued use of JANET for this purpose, subject to that formal determination.
4. The Lifelong Learning Network within Wales. The Welsh Assembly Government is replacing this network with the “Public Sector Broadband Aggregation” network designed to serve the needs of the whole public sector within Wales, and to come into service during the first half of 2008. Higher and further education access to the global Internet will continue to be via JANET. The Welsh Assembly Government has indicated a possible interest in the use of JANET in continuing to meet the needs of rest of the present Lifelong Learning Network users in this regard.

The proportion of the total demand represented by the latter three sectors amounts to approximately 20% of the totals shown in Section 2.2. Therefore these predictions may be an overestimate by up to this amount if all three sectors decide not to carry forward their existing arrangements beyond early to mid 2008. However, in UKERNA’s opinion this is unlikely, and as a consequence these elements of the total demand have been included in the overall prediction.

It is possible that during the lifetime of the contract other parts of the public sector will wish to use JANET to access the global Internet, although there are at present no firm plans or statements of intent in this respect. However, for this reason, and because growth in demand from the education sectors may prove to be stronger than expected, UKERNA is seeking a solution that provides the flexibility to increase bandwidth should it be needed, at controllable cost and in a timely manner.

2. OVERVIEW OF THE FACILITIES REQUIRED

2.1 Current External Connectivity

In order to extend the reach of facilities provided to its users, UKERNA has established access from JANET to the global Internet.

It has chosen to implement this by a threefold approach: peering with commercial Internet Service Providers (ISP) in the UK; establishing interconnectivity to networks operated by similar academic and research organisations in other European countries and around the world via GEANT; and procuring transit through ISPs to the global Internet. It is this third part of the provision which UKERNA is seeking to replace through this procurement.

Currently, the global transit service is provided by two suppliers. Each supplier provides UKERNA with a 10 Gbit/s connection to one of our two external gateway Point of Presence (PoP) locations for resilience purposes.

2.2 Bandwidth and Traffic Growth

Growth and prediction in demand since 2003 is shown in the table below. This table indicates the bandwidth required measured at the 95th percentile and taken from the highest value of each direction – to and from JANET. The shaded areas represent the years for which this contract will be in place.)

	Actual Value				Predicted Value			
Year	2003	2004	2005	2006	2007	2008	2009	2010
95 th percentile (Gbit/s)	2.1	3.0	3.3	5.2	9.8	14.1	20.0	28.6

Suppliers are reminded that the values above are 95th percentiles, and that sufficient capacity will be required to ensure that peaks in traffic demand are met without packet loss or an undue impact on round-trip times.

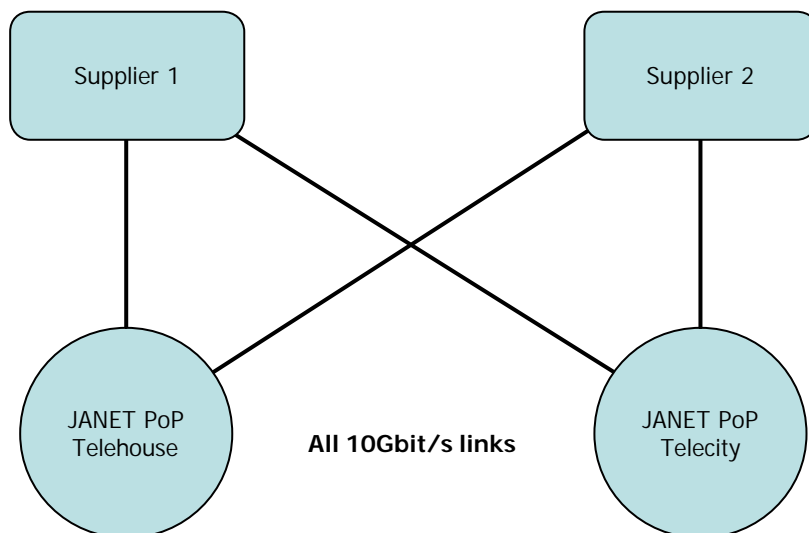
2.3 Service Requirements

UKERNA wishes to procure a global transit supply that is resilient both in terms of supplier and location of connection into JANET. UKERNA is therefore seeking to contract separately with **two** suppliers. Each supplier will provide transit capacity at each of UKERNA’s two Points of Presence in London (Telehouse North and Teleticity Harbour Exchange). In the event that one supplier fails, the other supplier should be able to carry the total traffic (including from one location, in the event of simultaneous failure of one supplier and one connection point)

Suppliers should note that the failure of a supplier may be temporary (a transient fault on the supplier’s network or equipment) or permanent (if a supplier ceases trading or is in breach of its contractual obligations to UKERNA). In the latter case, there will be an extended reliance on a single supplier providing the transit supply whilst a procurement is undertaken to replace the failed supplier.

Each supplier should be able to carry the total traffic in case of failure but should normally expect to carry around one half of the total. Initially each supplier should provide one 10Gbit/s connection to each of UKERNA’s two London Points of Presence by 30 August 2007 as shown in the “Initial Configuration” diagram below.

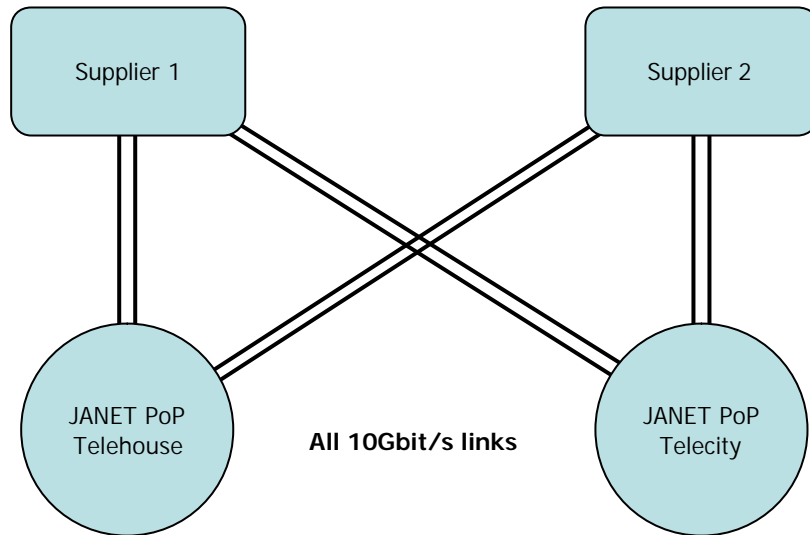
Initial Configuration for Global Transit Supply to JANET



By early 2008, as the peak traffic level is predicted to exceed 10Gbit/s, UKERNA requires increased bandwidth connected at each Point of Presence so that the service continues to provide

supplier and location resilience. UKERNA expects this to be implemented as optional additional connections at 10Gbit/s as shown in the “End 2007” diagram below, although it is interested to know about future 40Gbit/s connectivity options. The supplier might implement this additional capacity at the start of the contract (August 2007) or may choose to introduce it later in 2007, provided that it is ready for use at the start of 2008.

End 2007 Configuration for Global Transit Supply to JANET



The supplier will need to demonstrate that it has sufficient capacity in the form of trunk capacity within its own network and interconnect capacity agreements with its Internet partners to cover the likely demands of JANET users, both immediately and for the duration of the contract. UKERNA is seeking, therefore, contractually enforceable guarantees on round trip time and packet loss within the supplier’s own network.

3. PROCUREMENT PROCEDURE

3.1 General Issues

All formal communication with suppliers over the course of the procurement will be handled or arranged by UKERNA.

Responses to this OR will be accepted from any supplier, providing it conforms to the requirements defined in this section3.

3.2 Registration

Suppliers are required to register their intention to submit a proposal. Suppliers must register on the website:

www.achilles.com/etender/ukerna

Suppliers are asked to register as soon as they start to consider a response to this invitation to tender. In any event, suppliers **must** register before a proposal will be accepted.

UKERNA will not accept any registration requests after **25 May 2007**.

3.3 Electronic Copy

An electronic copy of this OR and of UKERNA's standard form of contract is available on the World Wide Web at the URL:

www.achilles.com/etender/ukerna

3.4 Clarifications on the Requirements

Suppliers will be provided with clarification of UKERNA's requirements in accordance with the EU directives on procurement.

Suppliers should raise any issues of clarification with the Procurement Co-ordinator whose contact details are as follows:

Procurement Co-ordinator UKERNA Lumen House Library Avenue Harwell Science and Innovation Campus Didcot Oxfordshire OX11 0SG United Kingdom	Telephone: +44 (0)1235 822 341 Fax: +44 (0)1235 822 286 E-mail: Procurement@ukerna.ac.uk
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Where issues of clarification arise which are relevant to more than one supplier, these will be posted on the web site at the URL above and sent by e-mail to each registered supplier.

Suppliers should submit all clarification requests by **25 May 2007** as UKERNA cannot guarantee to answer any clarifications that are submitted after this time.

3.5 Timetable

The steps and timetable for this procurement are as follows:

Activity	Date
Notice to European Journal	17 April 2007
Final date for registration	25 May 2007
Final date for clarifications	25 May 2007
Closing date for tenders	12:00 Noon, 4 June 2007
Supplier presentations	Friday 15 June 2007
Selection of preferred supplier	18 June 2007
Contracts placed by	30 June 2007
Delivery of the service	by 30 August 2007

UKERNA reserves the right to vary this timetable if the need arises, within the constraints of the EU Services Directive.

Tenders are required to remain valid for three months after tender submission.

3.6 Supplier Presentations

Suppliers who meet all the mandatory requirements of the Operational Requirement (and in particular have provided evidence in their responses that they have sufficient trunk capacity within their network and sufficient capacity interconnect agreements with their internet partners) will be invited by UKERNA to provide a presentation to the procurement panel members. The aim of this presentation is to enable UKERNA to confirm its understanding of each proposal.

UKERNA will invite each conformant supplier individually to attend UKERNA's offices on Friday 15 June at a time to be confirmed. Suppliers interested in bidding against this Operational Requirement are therefore required to make available appropriate staff for a presentation on this date. Invitations will be issued on Tuesday 12 June at the latest.

Suppliers should note that UKERNA requires a full response to the requirements given in this Operational Requirement and that the presentation is not a substitute for this. Incomplete responses to this Operational Requirement may lead to a supplier being eliminated before the supplier presentations. Suppliers are reminded that UKERNA will evaluate the proposal on the basis of the response to this Operational Requirement.

3.7 Evaluation Criteria

The contracts will be awarded on the basis of the offers that are the most economically advantageous. The main criteria to be used in determining which offers are the most economically advantageous will be:

1. the supplier's ability to meet the mandatory requirements; and
2. UKERNA's assessment that the supplier has sufficient trunk capacity within its network and sufficient capacity interconnect agreements with its internet partners to meet UKERNA's capacity requirements; and
3. UKERNA's assessment of the supplier's ability to provide the service on a timely manner as required based on the responses to the mandatory and information requirements; and
4. capital and recurrent costs evaluated over the two years of the contract and using the bandwidth predictions given in this Operational Requirement.

UKERNA reserves the right not to award a contract as a result of this invitation to tender.

3.8 Delivery of Tenders

All responses to the Operational Requirement document response must be loaded via the Portal on or before the date specified in section 3.5 above.

This should be provided in PDF format with the exception of spreadsheets that should be provided in Excel 97 or 2000. Any non-standard fonts used in electronic submissions must be embedded in the document.

Operational Requirement responses submitted after the deadline will not be considered.

3.9 Format of Tenders

The response to the specific requirements must take the following format:

A. Management Summary

This section should be a single page summary describing the main points of the bid.

B. Description of Services Proposed

This section must describe the services proposed. The information required to satisfy all the specific requirements must be provided in this section.

The response must address all the requirements both Mandatory Requirements (MR) and Information Requirements (IR) detailed in all sections of this OR.

The order of replies to requirements (MR and IR) must be given in the same numerical order as they are stated in this document. The reference number and the text of the requirement to which it relates must precede each response.

3.10 Document Notation

MRn A mandatory requirement.

A solution that does not meet all mandatory requirements will not be acceptable.

Suppliers must state how all requirements will be met, considering the issues and the points raised. **A statement of the form ‘this requirement will be met’ is not sufficient. Tenders must satisfy all mandatory requirements.** Failure to satisfy a mandatory requirement may exclude a tender from further consideration.

IRn An information requirement

It is vital that suppliers provide full information on specific topics. These topics are identified as information requirements. Failure in a tender to provide full, relevant information in answer to information requirements may prevent the evaluation from being conducted properly, and hence lead to exclusion of the tender. Assessment of the quality of the tender will be based on the responses to these requirements, and will influence the selection process.

3.11 Freedom of Information

UKERNA is subject to the provisions of the Freedom of Information (FOI) Act 2000. If a supplier considers that any information supplied by them is either commercially sensitive or confidential in nature, this should be highlighted and the reasons for the sensitivity given. In such cases, the relevant material will in response to FOI requests be examined in the light of the exemptions provided in the FOI Act.

4. REQUIREMENTS FOR EVIDENCE OF COMPETENCE TO SUPPLY

4.1 Financial and Economic Standing

MRI.....The supplier shall warrant that none of the following circumstances set out in Article 45 of EU directive 2004/18/EC applies to the supplier:

- *{item 2(a)} is bankrupt or is being wound up, where his affairs are being administered by the court, where he has entered into an arrangement with creditors, where he has suspended business activities or is in any analogous situation arising from a similar procedure under national laws and regulations;*
- *{item 2(b)} is the subject of proceedings for a declaration of bankruptcy, for an order for compulsory winding-up or administration by the court or for an arrangement with creditors or of any other similar proceedings under national laws or regulations;*
- *{item 2(g)} is guilty of serious misrepresentation in supplying the information required under this section or has not supplied such information.*
- *{item 2(h)} has been the subject of a conviction for participation in a criminal organisation, as defined in Article 2(1) of Council Joint Action 98/733/JHA.*
- *{item 2(i)} has been the subject of a conviction for corruption, as defined in Article 3 of the Council Act of 26 May 1972 and Article 3(1) of Council Joint Action 98/742/JHA3 respectively*
- *{item 2(j)} has been subject of a conviction for fraud within the meaning of Article 1 of the Convention relating to the protection of the financial interests of the European Communities.*

- *{item 2(k)} has been the subject of a conviction for money laundering, as defined in Article 1 of Council Directive 91/308/EEC of 10th June 1991 on prevention of the use of the financial system for the purpose of money laundering.*

MR2.....The supplier must provide evidence of financial and economic standing, as specified in Article 47 of EU directive 2004/18/EC using any or all of the methods described in paragraph 1 of Article 47.

4.2 Technical Capability and Experience

MR3.....The supplier must provide evidence of skills, experience and reliability as specified in the following areas taken from paragraph 2 of Article 48 of EU directive 2004/18/EC:

- *{item (g) of paragraph 2} a statement of the average annual manpower of the service provider or contractor and the number of managerial staff over the last three years;*
- *(item (i) of paragraph 2} an indication of the proportion of the contract which the services provider intends possibly to sub-contract.*

MR4.....Suppliers must provide a description of their measures for ensuring quality as indicated in article 49 of 2004/18/EC. For this item, a copy of the supplier's ISO 9000 certificate will be adequate. If the supplier is not registered under ISO 9000, then a brief description of the policy used to ensure quality will be acceptable.

IR5.....The supplier is invited to supplement the information above with a brief description of its general capability to provide the services being offered and an indication of similar services that have been provided during the last two years.

4.3 Presentation of Proposal

MR6.....Suppliers must be prepared, if invited, to attend UKERNA's offices on Friday 15 June 2007 to provide a presentation to the procurement panel members to enable UKERNA to confirm its understanding of each proposal. UKERNA will see each supplier individually and will regard the presentation as commercial in confidence.

5. REQUIREMENTS FOR THE OFFERED SERVICE

5.1 Contract Form

UKERNA requires its standard form of contract to be used for this service. The supplier is invited to consider the standard contract and to note any area of material concern.

MR7.....The supplier shall accept a contract based on UKERNA's standard form of contract.

IR8.....The supplier shall provide details of any area of material concern in UKERNA's standard form of contract.

MR9.....The supplier shall participate in an annual price review prior to 30 August each year during the contract term and subject to the terms of UKERNA's standard form of contract.

5.2 Charges

UKERNA requires a usage based charging mechanism. This should be structured as a monthly charge based on the total bandwidth (in Mbit/s) used by JANET traffic across access port. Suppliers may choose to express this as either a single rate of charge irrespective of the amount of bandwidth used, or as a table of rates dependant on the level of usage (e.g. with lower rates at

higher levels of utilisation). Suppliers may also choose to introduce a minimum or “committed” usage rate to which UKERNA must subscribe, again with different rates for this committed usage and any additional usage above this commitment.

However structured, suppliers must provide in their answers to the Mandatory and Information Requirements in this section their charges in sufficient detail and clarity to allow UKERNA to assess the total contract cost over a two-year period. In making this assessment, UKERNA will use its prediction of total usage rates as given in the section 2.2.

MR10.The supplier shall indicate the cost to provide one of two shared main supplies (where each supply will normally take a proportion of the entire load, but must be able to take the entire load if the other supply fails). The price shall be provided in accordance to UKERNA’s requirements above. The supplier shall state unambiguously exactly how its usage based charging algorithm works.

MR11.The supplier shall specify the cancellation charges (if any) for early termination.

MR12.UKERNA requires penalty payments for late delivery and failure to meet service levels. Suppliers shall indicate what penalty payments they would offer to UKERNA in these circumstances.

IR13.The supplier is invited to provide pricing details for other options that the supplier considers will be of interest in meeting our requirements (e.g. higher capacity provision than that indicated above; discount for higher committed rates etc).

All prices, including equipment costs, for the implementation, operation and maintenance of the proposed facilities should be included in the charge.

If UKERNA finds it necessary to place some interpretation on any aspect of the total cost, it will seek confirmation of our interpretation with the supplier. Subject to this process, costs that appear elsewhere in the proposal but are not included in the charge will be deemed to have been waived.

5.3 Delivery and Acceptance

UKERNA requires each supplier selected as a result of this invitation to tender to sign a contract by no later than 30 June 2007. The facilities will need to be tested, ready for service and accepted by UKERNA no later than 30 August 2007.

UKERNA requires each supplier to provide at least two 10Gbit/s links (one into each of the JANET London Points of Presence) by 30 August 2007 and a further two 10Gbit/s links (one into each of the JANET London Points of Presence) by 31 December 2007. The supplier may at its discretion choose to install all four links by 30 August 2007.

MR14.The supplier shall commit to delivering (i.e. installing and proving the operability of) at least the initial two 10Gbit/s links by 30 August 2007. The supplier shall state the date by which the facilities shall be delivered.

MR15.The supplier shall commit to delivering (i.e. installing and proving the operability of) at least the second two 10Gbit/s links by 31 December 2007. The supplier shall state the date by which the facilities shall be delivered.

MR16.The supplier shall make provision within its own rack space to accommodate any equipment that it wishes to place at the location.

IR17.The supplier shall provide details of the procedures for establishing successful working of the facilities provided and be prepared to provide test results to UKERNA.

5.4 Technical Requirements

UKERNA is seeking to find suppliers with sufficient capacity to meet its requirements as noted in item 2 of section 3.6. The supplier's response to the Information Requirements in this section which are relevant to those requirements will be used to evaluate the supplier's response against this requirement, and therefore to determine whether the supplier is to be invited to present its proposal as described in section 3.6.

IR18.....The supplier shall provide details of its IP backbone network topology, including details of transatlantic provisioning and peerings with other Internet Service Providers; and of its arrangements for providing connectivity to North and South America, Africa, Asia Pacific and commercial Europe. This description must include a network topology map, which may be supported by additional information.

IR19.....The supplier shall detail its policy for dealing with high levels of utilisation both on his own network and in the links with peers (e.g. automatic upgrade if average utilisation exceeds a certain predefined level).

IR20.....The supplier shall provide details of physical routing from UKERNA's Points of Presence in London to the chosen Points of Presence in the supplier's network. UKERNA will keep this information confidential use it to ensure that the routes from the two chosen suppliers are as independent from each other as possible.

IR21.....The JANET backbone already supports dual-stack IPv4 and IPv6, and UKERNA plans to run a full, JANET-wide IPv6 production service by the end of 2008. In this context, the supplier shall provide a statement of its support for IPv6 unicast and multicast.

IR22.....UKERNA is seeking suppliers who operate a BGP filtering policy in line with accepted industry practice. The supplier shall provide full details on its BGP filtering policy including the filtering method used, any restrictions on advertisements accepted such as prefix-length, how the filtering is updated and how often this is performed if automated.

IR23.....The supplier shall provide full details of its network policy, including prefix-length based route dampening and which BGP communities are supported to control route advertisements to its peers and preferences of the routes within its own network.

MR24.....The supplier shall support an IPv4 multicast service, utilising PIM-SM2, MBGP and MSDP.

IR25.....Taking into account the indicative packet loss and latency targets specified in UKERNA's standard form of contract in schedule 3 (SLA) clause 3.2, the supplier shall state its targets for packet loss and latency within its network; what remedial steps would be taken if the targets were not met; and what contractual guarantees including penalty payments it makes on these parameters.

IR26.....Taking into account the indicative availability target specified in UKERNA's standard form of contract in schedule 3 (SLA) clause 3.2, the supplier shall state the expected availability of the service measured over a rolling 12-month period from the port on UKERNA's router; and state what contractual guarantees including penalty payments it makes on this availability figure.

MR27.....The supplier shall provide 10Gbit/s, single mode, intermediate reach, packet over SONET interfaces. The supplier shall define the nature of its physical interface at the location where connectivity is to be established and any requirement which that interface places on any equipment which UKERNA may choose to connect to it.

5.5 Usage and Connection Policies

All traffic flowing across these facilities will be subject to the JANET Acceptable Use Policy, a copy of which may be found at:

<http://www.ja.net/services/publications/policy/aup.pdf>

This policy is designed to ensure that all content obeys applicable legislation, and is broadly acceptable under the present-day social norms governing use of the Internet.

MR28.The supplier shall place no restriction on UKERNA's use of the facilities provided, other than those which arise from statutory requirements or generally accepted Internet practice.

5.6 Traffic Growth

The capacity of the facilities acquired must be sufficient to support the needs of those using JANET. A key requirement is that UKERNA has the flexibility to specify and have implemented, at acceptable cost, such changes in capacity as are rendered necessary by growth in user demand during the term of the contract, even if these changes are only put in place for a few months at the end of the contract period.

IR29.The supplier shall specify the mechanism through which UKERNA will be able to implement changes to the capacity of the service provided, the capacity changes that will be available to UKERNA, and an indication of the lead times that can be expected for such changes to be implemented, as and when required, together with any minimum service period.

IR30.The supplier shall indicate if a 40Gbit/s port will be available as an upgrade option during the contract term. If so, please provide an indication of the lead times that can be expected for such changes to be implemented, as and when required, together with any minimum service period.

5.7 Fault Management

To provide a high degree of availability for JANET services, it is essential that faults are detected, reported and resolved in the shortest possible time. UKERNA requires the supplier to provide a single point of contact for fault management and help desk staff who will manage effectively all reported problems at any time of the day or night, throughout the year.

MR31.The supplier shall provide UKERNA operations staff with a means of reporting and tracking the resolution of problems with the service supplied. This reporting system shall be available 24 hours a day, 365 days of a year. The minimum requirement is that it should be possible to report a fault by telephone and that this report be acknowledged and that fault resolution shall commence within 15 minute of the call being placed.

IR32.UKERNA is looking for a robust fault management process. The supplier shall provide an outline of the mechanisms and processes used to track faults and the escalation process available to UKERNA.

MR33.The supplier shall provide monthly reports (by email to a nominated address) on its fault management performance, including as a minimum the number and nature of the faults incurred during the period, and the time to restore service after each fault was reported.

5.8 Maintenance

UKERNA appreciates that it is sometimes necessary for a service provider to perform maintenance on equipment or cables in the network. However, it wishes to ensure that the

amount of disruption caused by maintenance is minimised and that the supplier provides sufficient notice when maintenance is necessary. JANET uses a scheduled maintenance period between 07:00 and 09:00 (UK time) on a Tuesday morning for service affecting maintenance. UKERNA expects the supplier to use this scheduled maintenance period for its own service affecting maintenance work on the facilities supplied when possible.

UKERNA is required to provide to its users 14 days' notice of service affecting maintenance. UKERNA would, therefore, favour being given 14 days' notice from the suppliers but appreciates that suppliers may not be able to offer this.

Where it becomes necessary to perform emergency maintenance (that is service affecting maintenance carried out without the required notice period), the supplier will be expected to provide UKERNA operations staff with the maximum amount of notice possible, before commencing work. UKERNA expects that the amount of maintenance will be minimal.

MR34. Bearing in mind that UKERNA would favour as long a notice period as possible (with 14 days as a target), suppliers shall specify and commit to the notice period that shall be given before any maintenance is undertaken. The total amount of scheduled outage utilised in any one year shall not exceed 0.1% of the total service time.

IR35. The supplier shall give details of the mechanisms by which both routine and emergency maintenance will be carried out, the times at which such sessions will normally be scheduled, and shall indicate how its proposal fits in with the above requirement on notice and service outage.

5.9 Safety

IR36. The supplier shall provide information on any properties of its proposed equipment that may have safety implications, e.g. microwave or laser radiation. The supplier should state what precautions would need to be taken, or operational procedures adopted, by institutions or organisations where equipment is sited.

6. FREEDOM OF INFORMATION (FOI)

UKERNA is subject to the provisions of the Freedom of Information (FOI) Act 2000. If a supplier considers that any information supplied in a response to this Operational Requirement document is either commercially sensitive or confidential in nature, this should be highlighted and the reasons for the sensitivity given. In such cases, the relevant material will in response to FOI requests be examined in the light of the exemptions provided in the FOI Act.

IR37. The supplier shall highlight any information that is either commercially sensitive or confidential in nature and reasons for the sensitivity should be given.

IR38. The supplier shall provide contact details (name, telephone number and email address) of the person within its organisation that is responsible for dealing with FOI requests.

7. DETAILS OF LOCATIONS

Telehouse

Rack Number: Rack A1 in Suite K of TFM15
Telehouse North
Telehouse Europe Ltd
Coriander Avenue
London
E14 2AA

Telecity

Rack Number: Rack 5 in Suite 1S
TelecityRedbus Ltd
8-9 Harbour Exchange
London
E14 9GE