



## 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 European Procurement Directive.

**Any supplier wishing to submit a response to this Operational Requirement must register its intent with JANET(UK) before submitting the proposal. JANET(UK) will not accept proposals from suppliers who have not registered according to the procedure described in this document.**

**JANET(UK) will not accept any registrations after 24<sup>th</sup> February 2010.**

**Please do not try to upload documents very close to the closing time of the procurement, because the tender boxes will be locked at 12:00 and any documents that are part way through being uploaded will be rejected.**

**A RESPONSE RECEIVED AFTER THE DEADLINE WILL NOT BE CONSIDERED.**

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## 1. INTRODUCTION

This document is the Operational Requirement (OR) for the procurement of a high bandwidth global internet transit service.

The procurement process will be managed according to the open procedure as specified by the Public Contracts (Amendment) Regulations 2009 (SI 2009/2992) implementing the new Remedies Directive (Council Directive 2007/66/EC) 2007/66/EC and this document is an integral part of the open procurement announced by JANET(UK) in the Supplement to the Official Journal of the European Union.

### 1.1 JANET

JANET is the wide-area network that was created in 1984 to serve the needs of the higher education and research sector in the United Kingdom.

JANET provides services to all Higher Education Institutions, Further Education and Specialist Colleges and Research Council establishments in the UK. JANET also provides services to many Local Authority education networks, in support of ICT provision in schools and in adult and community learning. JANET is an IP based network with more than 1,000 direct connections available to a community of 18 million users.

JANET(UK) is responsible for providing JANET through a service level agreement with the Joint Information Systems Committee (JISC) of: the Higher Education Funding Council for England; the Scottish Funding Councils; the Higher Education Funding Council for Wales; the Department for Children, Education, Lifelong Learning and Skills (Wales); and the Department for Employment and Learning in Northern Ireland.

JANET(UK) also receives funding, via the JISC and otherwise, from the Learning and Skills Council, the Research Councils, the Department for Children, Schools and the Family, the Scottish Executive and the Welsh Assembly Government for the provision of JANET.

### 1.2 Contracting Authority

The contracting authority is the JNT Association, trading as JANET(UK).

## 2. SCOPE OF CONTRACT TO BE PLACED

### 2.1 JANET Users

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 England, particularly in the context of the schools' National Education Network. Similar services are currently provided to the Scottish Schools Digital Network in Scotland. JANET provides services as well to the PSBA 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.ja.net/documents/publications/policy/connection-policy.pdf>*

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.

### 2.2 Size and Duration of Contract

JANET(UK) is seeking an initial two-year contract term, with the possibility of extension for up to a further year.

The predictions of transit bandwidth given in Section 3.2 of this document as guidance to suppliers, and for the purpose of evaluating tenders, have been made on the assumption that these amounts of bandwidth will be required to serve the evolving needs of current JANET users.

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, JANET(UK) is seeking a solution that provides the flexibility to increase bandwidth should it be needed, at controllable cost and in a timely manner.

## 3. OVERVIEW OF THE FACILITIES REQUIRED

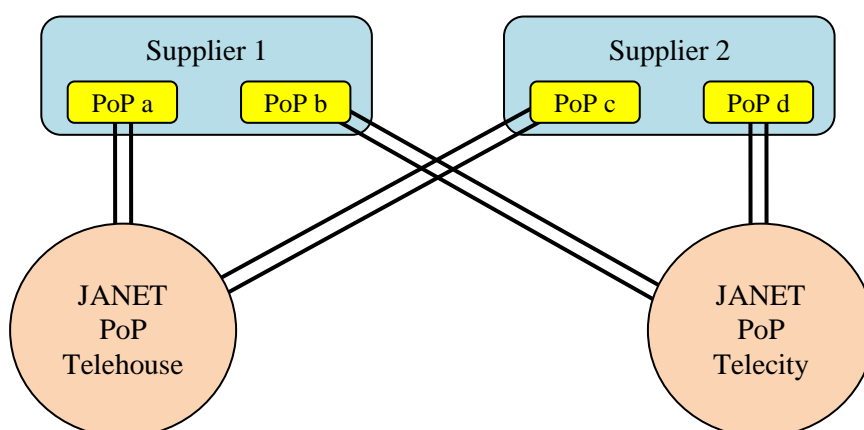
### 3.1 Current External Connectivity

To extend the reach of facilities provided to its users, JANET(UK) has established access from JANET to the global Internet. JANET(UK) has implemented this by a threefold approach:

1. peering with commercial Internet Service Providers (ISP) in the UK;
2. establishing interconnectivity to networks operated by similar academic and research organisations in other European countries and around the world via GEANT; and
3. procuring transit through two ISPs to the global Internet.

It is one of the suppliers for the third part of the provision which JANET(UK) is seeking to replace through this procurement.

Currently, the global transit service is provided by two suppliers. Each supplier provides JANET(UK) with four 10 Gbit/s connection, two each from two supplier PoPs, to the two JANET PoP locations for resilience purposes. Each interface is currently provided as single-mode short-reach (SONET SR1) packet over SONET.



### 3.2 Bandwidth and Traffic Growth

Growth and prediction in demand for the period of the contract is shown in the table below. This table indicates the *total* bandwidth required measured at the 95<sup>th</sup> percentile, specified in Mbit/s and taken from the highest value of each direction – to and from JANET. The shaded cells represent the values for the optional extension year of the contract. A breakdown of the total traffic by global region will not be provided.

At peak times the ratio of inbound and outbound traffic is approximately 2:1. Suppliers should note that under normal conditions each supplier will be expected to carry approximately one half of the total load, however should one supplier fail, the other supplier will be expected to carry the full load.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010							7,250	5,665	9,135	12,710	14,011	14,351
2011	16,365	17,168	16,445	14,920	17,241	13,463	9,661	8,015	11,931	16,948	18,309	19,038
2012	22,617	23,154	22,544	20,204	23,802	18,072	12,830	10,600	15,659	23,477	25,571	26,395
2013	29,747	31,365	30,203	27,589	32,226	24,183						

Suppliers are reminded that the values above are 95<sup>th</sup> percentiles specified in Mbit/s, 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.

During normal operation JANET intends to use the traffic engineering facilities provided by the supplier to balance traffic between that supplier and the two JANET PoPs. There are no plans to use these facilities to balance the traffic between suppliers. The global transit supplier that traffic to or from a particular destination will use, will depend on the topology of the Internet at that time.

### 3.3 Service Requirements

JANET(UK) maintains a global transit supply via separate contracts with two suppliers, so that the supply is resilient both in terms of supplier and location of connection into JANET. JANET(UK) staggers the procurement of these two suppliers such that one supplier is procured each year. JANET(UK) invites tenders for a two year contract (with a possible one year extension) for global transit supply to replace the contract that will terminate this year.

The successful supplier will:

- a) provide transit capacity at each of JANET(UK)'s two Points of Presence in London (Telehouse North and Telecity Harbour Exchange); and
- b) provide the connections from two Points of Presence within the supplier's network.

In the event that one supplier fails, the other supplier must be able to carry the total traffic.

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 JANET(UK)). 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.

The 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 the supplier should provide two 10Gbit/s connections to each of JANET(UK)'s two London Points of Presence by the date in the timetable (that is, a total of four 10Gbit/s connections).

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. JANET(UK)

is seeking, therefore, contractually enforceable guarantees on round trip time and packet loss within the supplier's own network.

### 4. PROCUREMENT PROCEDURE

#### 4.1 General Issues

All formal communication with suppliers over the course of the procurement will be handled or arranged by JANET(UK).

Responses to this OR will be accepted from any supplier providing it conforms to the requirements defined in section 4.2. However, the supplier that is continuing to provide service may not respond to this OR due to the requirement for resilience both in terms of supplier and location of connection into JANET.

#### 4.2 Registration

Each interested supplier is required to register its intention to submit a response to this OR via the JANET e-tendering opportunities portal at:

<https://tenders.ja.net>.

**Note:** if your company is not already registered as a user of the JANET(UK) portal it is necessary first to register as a user of the portal. Once this registration is accepted by JANET(UK), a username and password will be issued, and should be used for all future accesses to the portal. Note also that JANET(UK) will reject a supplier's registration if there is already a registration on the portal for that supplier. Please remember also that this initial registration is **not** a registration for a particular contract, it is **only** the registration of the supplier on the JANET(UK) portal. When the username and password are received, it is necessary then to login and register interest in a specific contract.

When registering, it is recommended that a generic mailbox (such as *sales@supplier*) is set up, so that information from the system can be sent to more than one representative at the company.

A detailed Supplier User Guide on how to use the JANET(UK) portal can be downloaded from the portal itself, or from or the JANET website at:

<http://www.ja.net/company/invitations-to-tender/index.html>.

Please note that JANET(UK) will **not** accept any registration requests after the close of registration date given in the timetable in section 4.5.

#### 4.3 Electronic copy

An electronic copy of the Operational Requirement is available to download from the JANET(UK) e-tendering opportunities portal at <https://tenders.ja.net>. Information about the procurement is available on the JANET(UK) procurement pages at:

<http://www.ja.net/company/invitations-to-tender/index.html>.

#### 4.4 Clarifications to the requirements

Each registrant will be provided with clarification of JANET(UK)'s requirements in accordance with the European Directive.

Each registrant should raise any issues of clarification via the JANET(UK) e-tendering opportunities portal at <https://tenders.ja.net>. Where issues of clarification arise which are relevant to more than one candidate, these will be made available via the JANET(UK) portal. Any clarification request should be submitted by no later than the date given in the timetable in section 4.5, as JANET(UK) cannot guarantee to answer any requests submitted after this date.

**4.5 Timetable**

The steps and timetable for this procurement are as follows:

<b>Activity</b>	<b>Date</b>
Notice to European Journal	5 <sup>th</sup> January 2010
Final date for registration	24 <sup>th</sup> February 2010
Final date for clarifications	19 <sup>th</sup> February 2010
<b>Closing date for tenders</b>	<b>12:00 Noon on 26<sup>th</sup> February 2010</b>
Selection of preferred supplier	19 <sup>th</sup> March 2010
Contracts placed by	23 <sup>rd</sup> April 2010
Service Commencement Date	30 June 2010

JANET(UK) reserves the right to vary this timetable if the need arises, within the constraints of the European Directive.

Tenders will be expected to remain valid for six months after tender submission.

JANET(UK) may invite suppliers to attend tender clarification meetings if required.

**4.6 Evaluation**

The contract will be awarded on the basis of the offers that are the most economically advantageous.

The responses to the questions in section 5 will be evaluated on a pass/fail basis and therefore will not be scored. If a supplier fails a question in this section then the tender will not be considered further by JANET(UK).

The main criteria to be used in determining which offers are the most economically advantageous will be:

	<b>Marking</b>	<b>Item</b>
1.	Pass/Fail	The supplier's ability to meet the mandatory requirements.
2.	70% of total marks.	JANET(UK)'s assessment of the supplier's technical merit and quality to enable it to provide the services described in this document on a timely basis based on the responses to the information requirements, JANET(UK) will also take into account any information it holds on the performance of current suppliers it uses when evaluating the tender responses.
3.	30% of total marks.	Capital and recurrent charges evaluated over both the initial two years and the extension year of the contract and using the bandwidth predictions given in this document together with JANET(UK)'s estimate of its integration costs.

JANET(UK) reserves the right not to award a contract.

### 4.7 Delivery of tenders

Suppliers are required to upload their response to the JANET(UK) e-procurement portal by the time and date specified in section 4.5.

The documents must be provided in PDF format with the exception of spreadsheets that should be provided in Excel format. Any non-standard fonts used in submissions must be embedded in the document.

Please do not try to upload documents very close to the closing time of the procurement, because the tender boxes will be locked at 12:00 and any documents that are part way through being uploaded will be rejected.

In order to assist in the evaluation of tender responses, each supplier is asked to provide its response in one document rather than submit a main document with reference to other separate documents. As part of this process, each supplier should provide the pertinent information within the response document rather than submitting a large annex document that procurement panel members need to read in its entirety in order to obtain the key facts.

A detailed Supplier User Guide on how to use the JANET(UK) e-tendering opportunities portal can be downloaded from the portal at <https://tenders.ja.net> or our website at:

<http://www.ja.net/company/invitations-to-tender/index.html>.

A response submitted after the deadline will not be considered.

### 4.8 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.

### 4.9 Document notation

*MR<sub>n</sub>* 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 will exclude a tender from further consideration.

*IR<sub>n</sub>* 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 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.

## 5. REQUIREMENTS FOR EVIDENCE OF COMPETENCE TO SUPPLY

The questions in this section will be used by JANET(UK) to judge a supplier's competence to supply. This section will be evaluated on a pass/fail basis. If a supplier fails a question in this section then its tender will not be considered further by JANET(UK).

### 5.1 Personal Situation of the Candidate or Tenderer

*MR1 ..... 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 or sub-contractors*

- *{item 1(a)}: has been subject to a conviction for participation in a criminal organisation, as defined in Article 2(1) of Council Joint Action 98/733/JHA;*
- *{item 1(b)}: 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 98/733/JHA3 respectively;*
- *{item 1(c)}: 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 1(d)}: been the subject of a conviction for money laundering, as defined in Article 1 of Council Directive 91/308/EEC of 10<sup>th</sup> June 1991 on prevention of the use of the financial system for the purposes of money laundering;*
- *{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(c)}: has been convicted by a judgement which has the force of res judicata in accordance with the legal provisions of the country of any offence concerning his professional conduct;*
- *{item 2(d)}: has been guilty of grave professional misconduct proven by any means which the contracting authorities can demonstrate;*
- *{item 2(g)}: is guilty of serious misrepresentation in supplying the information required under this Section or has not supplied such information.*

### 5.2 Economic and Financial Standing

JANET(UK) now routinely runs credit checks on suppliers submitting tender responses. The results of those credit checks will be taken into account as part of the evaluation of the economic and financial standing of companies.

*MR2 ..... The supplier's total charges in any year (including installation charges) shall be 20% or less of the supplier's annual turnover (averaged over the last three years). The supplier will provide evidence of financial and economic standing, as specified in Article 47 of EU directive 2004/18/EC by providing verification of the undertaking's overall turnover the last three financial years available.*

### 5.3 Technical Capability and Experience

*MR3 ..... The supplier shall deploy appropriate measures and processes to ensure quality in the delivery of its services. The supplier shall provide a description of its 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.*

MR4 ..... *The supplier network must not use IP transit capacity purchased from other providers to access any part of the general Internet outside its own backbone.*

### 6. REQUIREMENTS FOR AWARD OF THE OFFERED SERVICE

#### 6.1 Contract Form

The Invitation to Tender includes a copy of JANET(UK)'s standard form of agreement. JANET(UK) requires its standard form of agreement to be used for this service. Each supplier is invited to consider the standard form of agreement and to note any area of material concern. As part of its response to the Operational Requirement document, each supplier is asked to indicate that it is willing to agree to the JANET(UK) agreement and confirm any areas of material concern that it has.

Documents will have the following decreasing order of priority in determining resolution of any conflicts once a contract is in place:

1. The body of the contract
2. The schedules to the contract;
3. The supplier's response to this OR, as modified by any written clarifications and amendments;
4. Ancillary information supplied with the supplier's response

MR5 ..... *The supplier shall indicate that it will accept a contract under English law, and the principle and order of the document priority listed above.*

IR6 ..... *The supplier is invited to highlight any material issues arising from JANET(UK)'s standard form of contract which it would wish to raise if it was invited to conclude an agreement. Any specific issues which the supplier may have with JANET(UK)'s standard form of contract should be raised at this stage by reference to specific contract clauses if appropriate. If no issues are identified by the supplier in its response to IR6, then JANET(UK) will reasonably assume that there should be no issues likely to cause difficulty in agreeing the contract with the supplier.*

MR7 ..... *The supplier shall agree that it intends to sign the contract with JANET(UK) by the date in the timetable in section 4.5 of this document.*

#### 6.2 Delivery and Acceptance

The facilities shall be tested, ready for service and accepted by JANET(UK) no later than the Service Commencement Date in the timetable..

MR8 ..... *The supplier shall commit to delivering (i.e. installing and proving the operability of) four 10Gbit/s links by the Service Commencement Date in the timetable. The supplier shall state the date by which the facilities shall be delivered.*

MR9 ..... *The supplier shall make provision within its own rack space to accommodate any equipment that it wishes to place at the location.*

IR10 ..... *The supplier shall provide details of the procedures for establishing successful working of the facilities provided and be prepared to provide test results to JANET(UK).*

#### 6.3 Technical Requirements

JANET(UK) is seeking to find suppliers with sufficient capacity to meet its requirements.

IR11 ..... *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 shall include a network topology map, which may be supported by additional information.*

- IR12 ..... 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 level).*
- IR13 ..... The supplier shall provide details of physical routing from JANET(UK)'s Points of Presence in London to the chosen Points of Presence in the supplier's network. JANET(UK) will keep this information confidential and use it to ensure that the routes from the chosen supplier and the existing supplier are as independent from each other as possible.*
- MR14 ..... The JANET backbone runs IPv4 and IPv6 in a dual-stack configuration. The supplier shall support a dual-stack configuration with JANET.*
- IR15 ..... The supplier shall state any differences between the transport of IPv4 and IPv6 traffic on its backbone, including (but not limited to) any restrictions in the scope of IPv6 connectivity to other networks.*
- IR16 ..... The supplier shall state its plans for the support of IPv6 multicast.*
- IR17 ..... JANET(UK) 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.*
- IR18 ..... 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.*
- MR19 ..... The supplier shall support an IPv4 multicast service, utilising PIM-SM2, MBGP and MSDP.*
- IR20 ..... Taking into account the indicative packet loss and latency targets specified in JANET(UK)'s standard form of contract in schedule 3 (SLA), 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.*
- IR21 ..... Taking into account the indicative availability target specified in JANET(UK)'s standard form of contract in schedule 3 (SLA), the supplier shall state the expected availability of the service measured over a rolling 12-month period from the port on JANET(UK)'s router; and state what contractual guarantees including penalty payments it makes on this availability figure.*

Suppliers should note that JANET currently uses 10Gbit/s single-mode short-reach (SONET SR1) packet over SONET interfaces for its global transit supply. JANET(UK) will take into account the costs of additional interfaces required within JANET to integrate the proposed solution with JANET. JANET(UK) will use the following costs:

- a) SONET: No costs as JANET(UK) already has the interfaces that it needs for this solution; and
- b) Gigabit Ethernet: £70,000 for all four interfaces and associated equipment.

- MR22 ..... The supplier shall provide 10Gbit/s connections using either single-mode short-reach (SONET SR1) packet over SONET or single-mode 10GbaseLR LANPHY GigabitEthernet interfaces. Suppliers shall state the interface that they will provide.*
- IR23 ..... 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 JANET(UK) may choose to connect to it.*
- IR24 ..... The supplier shall provide details on the options available to dynamically load-share traffic across the group of links between one supplier PoP and the relevant JANET one at the link or IP layer and any caveats or restrictions.*

### 6.4 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/company/policies/aup.html>*

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.

*MR25 ..... The supplier shall place no restriction on JANET(UK)'s use of the facilities provided, other than those which arise from statutory requirements or generally accepted Internet practice.*

### 6.5 Traffic Growth

The capacity of the facilities acquired must be sufficient to support the needs of those using JANET. A key requirement is that JANET(UK) 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 towards the end of the contract period.

*IR26 ..... The supplier shall specify the mechanism through which JANET(UK) will be able to implement changes to the capacity of the service provided, the capacity changes that will be available to JANET(UK), 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.*

### 6.6 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. JANET(UK) 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.

*MR27 ..... The supplier shall provide JANET(UK) 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.*

*IR28 ..... JANET(UK) 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 JANET(UK).*

*MR29 ..... 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.*

### 6.7 Maintenance

JANET(UK) 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. JANET(UK) expects the supplier to use this scheduled maintenance period for its own service affecting maintenance work on the facilities supplied when possible.

JANET(UK) is required to provide to its users 14 days' notice of service affecting maintenance. JANET(UK) 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 JANET(UK) operations staff with the maximum amount of notice possible, before commencing work. JANET(UK) expects that the amount of emergency maintenance will be minimal.

JANET(UK) would prefer a supplier that is prepared to negotiate exact timing and date of service affecting maintenance particularly when the maintenance period coincides with the maintenance scheduled by the other global transit supplier.

*MR30 ..... The total amount of scheduled outage utilised in any one year shall not exceed 0.1% of the total service time.*

*IR31 ..... Bearing in mind that JANET(UK) 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.*

*IR32 ..... 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, service outage and negotiation of exact time and date.*

## 7. CHARGES

Suppliers should supply JANET(UK) with a clear charging mechanism – which may be a usage based mechanism, a flat rate mechanism or some other scheme.

If a usage based charging mechanism is proposed, this should be structured as a monthly charge based on the total bandwidth (in Mbit/s) used by JANET traffic across all access ports. 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 JANET(UK) must subscribe, again with different rates for this committed usage and any additional usage above this commitment.

*IR33 ..... The supplier shall clearly explain the charging mechanism that it proposes.*

*IR34 ..... The supplier shall specify the cancellation charges (if any) for early termination.*

*MR35 ..... JANET(UK) requires pre-estimated compensation payments for late delivery and failure to meet service levels.*

*IR36 ..... The supplier shall indicate what rates and amounts it would offer to JANET(UK) in respect of the pre-estimated compensation payments.*

*IR37 ..... 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 JANET(UK) 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.

*IR38. .... The supplier shall provide the charges for the service specified in this OR. The charges shall include:*

- *all installation charges; and*
- *the basis on which recurrent charges are made (for example, the cost per Mbit/s per month). If applicable, the supplier shall state unambiguously exactly how its usage based charging algorithm works.*

*The supplier shall provide the recurrent charges that would be made for each month of the two years of the contract and the optional extension year based on the assumption that the supplier will take one half of the traffic load indicated at the 95<sup>th</sup> percentile level in section 3.2 above.*

*All charges shall be provided in sterling and be shown without the addition of VAT.*

*All charges to JANET(UK) shall be included in this response. Any charges not included here will be deemed to have been waived.*

## 8. FREEDOM OF INFORMATION (FOI)

JANET(UK) is subject to the provisions of the Freedom of Information (FOI) Act. 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.

*MR39. .... The supplier shall highlight any information that is either commercially sensitive or confidential in nature and reasons for the sensitivity should be given.*

*MR40. .... 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.*

## 9. DETAILS OF LOCATIONS

<b>Telehouse</b> Rack A1 in Suite K of TFM15 Telehouse North Telehouse Europe Ltd Coriander Avenue London E14 2AA	<b>Telecity</b> Rack 5 in Suite 1S Telecity Group plc 8-9 Harbour Exchange London E14 9GE
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