



 **NATIONAL MUSEUMS LIVERPOOL**

NML Disaster Recovery SAN Replacement Tender

**Author:** Ian Lindsay

**Date:** 18 /11/2019

Contents

1. Introduction 3

1.1 Company Background 3

1.2 High Level Overview of Requirements 3

* 1. Existing Solution 4

2. Tender Instructions 5

2.1 Introduction 5

2.2 General 5

2.3 Confidentiality and Non-Disclosure 6

2.4 Accuracy of Information and Liability of NML 6

2.5 Cost of Preparation 7

2.6 Oral Agreement or Arrangements 7

2.7 Independent Price Determinations 7

2.8 Payments Against a Contract Award 7

2.9 Bidder Misrepresentation or Default 7

2.10 Amendments to the Tender 7

* 1. Responding to the Tender 7

3. Tender Timing, Scoring and Process 9

3.1 Questions and Additional Information 9

3.2 Target Timetable 9

3.3 Timing and Delivery 9

3.4 Compliance 10

3.5 Evaluation 10

* 1. Bidder Interviews 10

4. Bid Requirements 12

4.1 Introduction 12

4.2 Management Summary 12

4.3 Company Background 12

4.3.1 Company Details 12

4.3.2 Financial Information 13

4.3.3 Third Party Services 13

4.3.4 Relevant Experience and Performance 13

4.4 NML Procurement Protocol 13

4.5 Timetable 14

4.6 Contractual Considerations 14

4.7 Costs 14

* 1. Summary of Documents to be returned as part of Submission 14

5. Requirements Specification 15

5.1 Installation 16

5.2 Support / Maintenance 16

**Appendices**

Appendix A – Form of Tender

Appendix B – NML Procurement Protocol

|  |  |
| --- | --- |
| Introduction  |  |

## Company Background

National Museums Liverpool (NML) is one of the world’s leading museum organisations. NML currently comprises eight museums in and around Merseyside. Entry to all our venues is free, with circa 3 million visitors per year. We hold in trust and safeguard some of the world’s greatest museum collections, which are universal in their range – everything from archaeology and ethnology, natural and physical sciences, fine and decorative arts, maritime, social and industrial history. We are core-funded by central UK government, and we are the only national museum service in England based wholly outside London, so we have a unique fourfold role – we are the main museum service for Liverpool and Merseyside; the largest cultural organisation in the North West of England; and we operate at both national and international levels.

Having played a pivotal role in the cultural, educational and economic life of Liverpool and the North West for more than 150 years, our success can be measured in terms of how well we combine this local and regional role with our national and international responsibilities.

Our mission is to be the world’s leading example of an inclusive museum service. We believe in the concept of social justice; we are funded by the public and in return we strive to provide an excellent service to the whole of the public. We believe in the power of museums to change people’s lives. We work hard to be a free museum service and focus our venues, exhibitions and education resources to reach out, and to represent the diverse needs of our local communities.

National Museums and Galleries on Merseyside was established as a national museum as an incorporated Trustee Body by the Merseyside Museums and Galleries Order 1986, because of the outstanding quality of its collections. In 2003 the name was changed to National Museums Liverpool. Our origins go back to 1851 and the founding of Liverpool Museum. NML is an exempt charity by virtue of Schedule 3 to the Charities Act 2011.

NML has status as a Non Departmental Public Body (NDPB) sponsored by the Department for Culture, Media and Sport (DCMS). The DCMS became the principal regulator of NML on 1 June 2010 and provides the majority of its revenue funding.

## High Level Overview of Requirements

Bidders are asked to submit a formal tender for the refresh of the Disaster Recovery storage SAN for National Museums Liverpool.

NML are looking to purchase a new SAN with at minimum of 50 Tb useable storage to give five year’s growth capacity.

This solution should incorporate disks that will give a general performance increase across all servers.

The services of an IT solutions provider are required to complete the supply, installation and migration of the first 5 virtual servers to the new SAN. This should be a knowledge share activity to allow the NML IT Technical team to complete the migration of the rest of the virtual servers.

The IT Hardware provider needs to ensure delivery of a high quality system that not only matches the facilities requirements but will operate with minimal maintenance and maximum reliability.

Every effort has been made to ensure that the information within this document is correct and will deliver a full and complete working system. The IT solutions provider should be satisfied that they have allowed for all necessary hardware, interfaces and interconnections, as well as all configuration of all hardware and software, to deliver a fully operable system that will meet the client’s expectations.

The response should directly address the requirements, although alternative items may be offered, you are to submit prices for the requirements as presented and any changes are to be separately priced and explained

## Existing Solution

## A description of the current solution NML have in place for the storage is listed below:

* Nine sites connected to a central site with a MPLS network. The slowest link is 20Mbps.
* A 6 node Hyper-V 2012R2 cluster running on a mix of Dell R720 and R710 servers in a virtualisation infrastructure.
* 3 x Dell Equallogic Arrays that feed storage to the DR clusture via iSCSI:

1 x PS6000 + 1 x PS4000 Array form members of one SAN group

1 x PS44100 is a member of another SAN group

* This gives a total capacity of 40Tb usable storage space after RAID to the Dr cluster. The hardware utilies ‘rotating HDD’ disks which are all 7200RPM speeds.
* NML currently have separate switches for the SAN and LAN networks. SAN networking is currently provided by a 1Gb Network switch (Dell Force 10 S25)
* NML currently use VEEAM Backup and Recovery 9.5 UR 4 to replicate data from the primary site to the Dr site. In the event of failure of the main server provision, the backup server environment will operate using Veeam backup and replication.
* The Production and DR datacentres connect across the MPLS network with 100Mb links into their locations.
* At present circa 70 virtual servers are replicated across to the DR environment.

|  |  |  |
| --- | --- | --- |
|

|  |  |
| --- | --- |
| Tender Instructions  |  |

Introduction |

# Tendering is required by NMLs procurement processes that ensure that NML is adhering to Managing Public Money guidelines. The Bidder is requested to propose a solution that will meet the current and future requirements of NML, as detailed within this tender pack.

## General

NML reserves the right, without prior notice, to change, modify, or withdraw the basis of its request and/or to reject all proposals and terminate negotiations at any time. In no circumstance will NML incur any liability in respect of time, effort or costs incurred in regard to either discussions, meetings or time spent in respect of reviewing and/or responding to this document or any subsequent material.

This tender is not a purchase order or an offer to contract and does not constitute an offer capable of acceptance. This tender does not commit NML or any official of it to any specific course of action. The issue of this tender does not bind NML or any official of it to accept any proposal, in whole, or in part, whether it includes the lowest priced proposal, nor does it bind any officials of NML to provide any explanation or reason for its’ decision to accept or reject any proposal. Moreover, while it is the intention of NML to enter contract negotiations with the selected bidder, the fact that NML has given acceptance to a specific Bidder does not bind it or any official of it in any manner to the bidder. Acceptance of a proposal neither commitsNML to award a contract to any bidder, even if all requirements stated in this tender are satisfied, nor does it limitNML’s right to negotiate in their best interest. NML reserves the right to contract with a bidder for reasons other than the lowest price. Contract award will be post the tender process and may be awarded without discussions or negotiations

The bidder shall be deemed to have examined before the submission of their bid submission, all the provisions in this tender as well as regulations and other information relevant to your bid submission, and to have fully considered the risks, contingencies, and other circumstances, which could affect the bid submission. The bidder shall be responsible for obtaining all information by the making of reasonable and prudent inquiries and, by prior arrangement.

By submitting a bid submission the bidder represents that it has read and understood the tender. The bidder will consider the contents of any submitted bid submission as an offer to contract.

Any attempt by bidders or their advisors to influence the contract award process in any way may result in the bidder being disqualified. Specifically, bidders shall not directly or indirectly, at any time:

* Revise or amend the content of their tender in accordance with any agreement or arrangement with any other person, other than in good faith with a person who is a proposed partner or bidder;
* Enter into any agreement or arrangement with any other person as to the form or content of any other tender, or offer to pay any sum of money or valuable consideration to any person to effect changes to the form or content of any other tender;
* Enter into any agreement or arrangement with any other person that has the effect of prohibiting or excluding that person from submitting a tender;
* Canvass NML or any employees or agents of NML in relation to this procurement; or
* Attempt to obtain information from any of the employees or agents of NML or its advisors concerning another bidder or tender; or
* Offer, pay, promise to pay, or authorize the giving of any financial or other benefit to any person for the purpose of obtaining an improper advantage, or otherwise conduct themselves in a manner contrary to any anti-bribery or anti-money laundering legislation and/or regulations in the broadest sense (whether issued by the EU, the US, the UN or any other body) or any other such rule or legislation that may apply from time to time.

Bidders are responsible for ensuring that no conflicts of interest exist between the bidder and its advisors, and NML and its advisors and Partners.

NML also reserves the right to cease discussions with any bidder from the date of submission of bidder tender.

Failure to meet a qualification or requirement in this tender will not necessarily subject a proposal to disqualification but may do so.

## 2.3 Confidentiality and Non-Disclosure

The information contained in this tender (or accumulated through other written or verbal communication) is confidential. It is for proposal purposes only and is not to be disclosed or used for any other purpose.

Information received by NML in this tender will be held in strict confidence and will not be disclosed to any party, other than within NML and their engaged consultants if appropriate,without the express written consent of the bidder.

NML undertakes not to publicise any information obtained during this tender process, either generally or to any other bidders involved in the tender. Additionally, there will be no obligation on the part of NML to share any of the results or conclusions of the tender process with any bidder.

As a responder to this tender, you are reminded of the need for confidentiality and the need not to divulge your actual or intended tender price or an approximation of that price to any other person or body until we notify you that the contract has been awarded.

## 2.4 Accuracy of information and liability of NML

The information contained in this tender has been prepared by NML in good faith but does not purport to be comprehensive or to have been independently verified. NML does not accept any liability or responsibility for the adequacy, accuracy, or completeness of, or make any representation or warranty (express or implied) with respect to the information contained in the tender, or with respect to any written or oral information made or to be made available to any bidder or its professional advisors and any liability therefore is hereby expressly disclaimed.

Bidders considering entering into a contractual relationship with NML should make their own enquiries and investigations of NML's requirements. The subject matter of this tender shall only have contractual effect when it is contained in the express terms of an executed agreement.

Nothing in this tender is, or should be, relied upon as a promise or representation as to the future, and NML does not undertake to provide bidders with access to any additional information, or to update the information in this tender, or to correct any inaccuracies that may become apparent. NML reserves the right, without prior notice, to change the procedures outlined in this tender or to terminate discussions and the delivery of information at any time before entering into an agreement.

Should there be any obvious typographical errors or misunderstandings in the tender documentation then clarification should be sought. However, if the response is found to misrepresent facts, the documents will be deemed void. In the case where the error or misrepresentation is not discovered until after the contract is awarded, we reserve the right to determine the contract and costs incurred by us as a result of the determination shall be recoverable from the bidder under the contract.

## 2.5 Cost of Preparation

NML will not accept any liability or responsibility for any costs incurred by the bidder in preparing this tender document or any associated work effort.

## 2.6 Oral Agreement or Arrangements

Any alleged oral agreements or arrangements made by the bidder with any NML agent or employee will be disregarded in any proposal evaluation or associated award.

##

## 2.7 Independent Price Determinations

The bidder shall warrant, represent, and certify that the following requirements have been met in connection with their proposal for this tender:

* The costs proposed have been arrived at independently, without consultation, communication, or agreement for the purpose of restricting competition as to any matter relating to such process with any other organisation or with any competitor;
* Unless otherwise required by law, the pricing proposed has not been knowingly disclosed by the bidder on a prior basis directly or indirectly to any other organisation or to any competitor; and no attempt has been made, or will be made, by the proposed to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition.

## 2.8 Payments Against a Contract Award

Under no circumstances shall the successful bidder begin to perform under the contract prior to the effective date of the contract. NML shall assume no liability for payment of services under the terms of the contract until the successful bidder is notified that the contract has been agreed by both parties.

## 2.9 Bidder Misrepresentation or Default

NML may reject the proposal and void any award resulting from this tender to a bidder who makes any material misrepresentation in their proposal or other submittal in connection with this tender.

## 2.10 Amendments to the Tender

NML reserves the right to issue amendments or modifications to this tender during the tender stage. These will be amended on the procurement portal where the tender was originally advertised and bids will be assumed to take account of any such modifications and amendments.

## 2.11 Responding to the Tender

In responding to this tender, the bidder you specifically agrees to the following:

Having examined all parts of the tender that the supply of the Goods and/or Services to NML will be at the rates/prices as provided. All prices must be quoted on the basis indicated in the accompanying documents, except where the bidder proposes alternative priced procedures, and should **exclude VAT.** Discounts for prompt payment should be stated. The basis of the price shall be inclusive of all costs and delivery to NML.

That any contract whatsoever that may result from this tender shall be subject to the laws of England and Wales as interpreted in an English Court.

The prices quoted and all other information supplied in this tender are valid and open to acceptance by NML for a period three calendar months from the tender return date specified in the tender

The essence of competitive tendering is that NML shall receive bona fide competitive tenders from all companies tendering. In recognition of this principle, any response is declared to be a bona fide tender, intended to be competitive and that the bidder (or representatives) have not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other person.

The bidder declares that you have not done and undertake that you will not do any of the following acts:-

* communicate with a person, other than the person calling for this tender, the amount or approximate amount of the proposed tender.
* enter into any agreement or arrangement with any other person that he shall refrain from tendering or as to the amount of any tender to be submitted.
* offer to pay or give, or agree to pay or give, any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the requirement any act or thing of the sort described above.

|  |  |  |
| --- | --- | --- |
|

|  |  |
| --- | --- |
| Tender Timing, Scoring and Process  |  |

 |

## 3.1 Questions and Additional Information

Formal queries concerning the content of this tender and the bidder’s submission should be submitted in writing by e-mail to Ian Lindsay (Ian.Lindsay@liverpoolmuseums.org.uk) with the subject title “NML SAN Replacement Tender”

Where questions are raised by bidders and answers given clarify NMLs requirements for the tender, then these questions and answers may be shared with other bidders responding to this tender.

Queries must not be directed through any other employee, contractor or consultant who is engaged as part of the tender working party.

## 3.2 Target Timetable

The target timetable for this project is shown in the table below but bidders must be aware that whilst every effort will be made to meet these dates, the timetable may change for operational reasons

|  |  |  |
| --- | --- | --- |
| **Step** | **Task** | **Date** |
| 1. | Tender issued | **26/11/2019** |
| 2. | Deadline for clarification questions  | **17/12/2019** |
| 3. | Responses to clarification questions issued | **19/12/2019** |
| 4. | **Deadline for Bid Submission** | **08/01/2020** |
| 5 | Evaluation of the Tender Responses commences | **08/01/2020** |
| 6. | Clarification meetings if required | **17/01/2020** |
| 7. | Notification to unsuccessful Bidder | **17/01/2020** |
| 8. | Provisional notification to Successful Bidder  | **17/01/2020** |
| 9. | Order Placed & contracts signed | **27/01/2020** |
| 10. | Installation complete | **30/03/2020** |

Note – all deadlines are at Noon on that business day.

## 3.3 Timing and Delivery

The bidder must provide a full submission by email. Bids should be in Microsoft Word, Excel or PDF format. The submission must include a copy of “Appendix A - Form of Tender”.

The submission must be made to Tenders@liverpoolmuseums.org.uk. To ensure that your submission is successful you should ensure that each email is less than 8Mb. Emails should be titled “NML SAN replacement Tender”. If multiple emails are sent the header should indicate they are “Part x of xx”.

Bid submissions must be received no later than **Noon on 8th January 2020.** Any response received after this date and time may be discounted from further consideration. Any requirement that the bidder might have for proof of delivery is at the bidder’s discretion and cost.

No bid submission will be opened until the deadline of **Noon on 8th January 2020.**

To enable an efficient and fair evaluation process this process must be strictly adhered to. If a bidder does not comply with the requirements contained in this Section, NML may (in its sole discretion) disqualify the bidder from the competition.

**3.4 Compliance**

The bid submissions will be checked initially for compliance with this tender and for completeness. Responses that are not substantially complete and/or compliant will be rejected.

The compliance criteria are as follows:

Tender documentation received by specified deadline

All relevant questions answered

All relevant information provided

Compliance with any specified timescales

Signed Form of Tender

Signed Acknowledgement of NML Procurement Protocol form

Ability to meet the deadlines specified in section 4.5

**3.5 Evaluation**

Bid submissions that pass the compliance checks will then be evaluated against the criteria specified below. During the evaluation period, NML reserves the right to call for further information from

The bid submissions will be evaluated according to the following criteria, to determine the highest scoring responses. :

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Element of Evaluation** | **Max Score Available** |
| Quality | Evidence of Installation to Timescale | 5 |
|  | Proposed hardware solutions & performance | 25 |
|  | Support & Maintenance  | 5 |
|  | References – evidence of supply and installation of a similar solution within the last 12 months | 5 |
|  |  |  |
| Cost | Cost of the contract  | 60 |
|  |  |  |
|  | **Total** | **100** |
|  |  |  |
|  | **Minimum Quality Score threshold (60%)** | **24** |

Only information provided as a direct response to this tender will be evaluated. Information and detail which forms part of general company literature or promotional brochures etc. will not form part of the evaluation process. Supplementary documentation may be attached where you have been directed to do so. All sections must be answered unless advised otherwise.

**In order to protect the quality of any procurement, any tender response that scores below the minimum quality score threshold will not be considered.**

**3.6 Bidder Interviews**

Following the deadline for bid submission, NML will evaluate and score each bidder’s submission against the evaluation criteria. Bidders may be invited to attend an interview to discuss the content of their written bid. A maximum of 4 bidders will be invited to interviews. Any bidder with a submission score greater than 20% behind the highest score will not be interviewed.

The post tender interviews will be held on 17th January 2020. Notification will be sent to those bidders invited to interview.

|  |  |
| --- | --- |
| Bid Requirements  |  |

## 4.1 Introduction

This section provides bidders with details of the form and content of bids that are invited and sets out the procedural requirements with which bidders must comply when submitting bids in order for their bids to be considered by NML. The process is intended to:

• assist NML in choosing the most economically advantageous bid;

• make clear the requirements with which bidders must comply and the basis on which the bids will be evaluated; and

• maintain competition throughout.

If a bidder does not comply with the requirements contained in this Section, NML may (in its sole discretion) disqualify the Bidder from the competition. Bids should be as concise as possible, whilst providing sufficient information to enable NML to evaluate bids in accordance with this tender.

The bidder is required to prepare the proposal and pricing based on the requirements specification detailed in section 5 of this document. Any assumptions that the bidder makes must be clearly stated in the appropriate section.

The costs must be fully itemised and transparent.

If the bidder has additional information that is directly relevant to the stated requirements but not explicitly requested, this may be added to the end of the most appropriate section under the heading “Additional Information” or referenced out to appendices.

Failure to return all of the requested documentation may result in your tender not being considered further.

This document details baseline requirements for the solution. This is not meant to be an exhaustive list of requirements but it will however serve to identify suitable solutions and bidders. NML reserves the right to modify its requirements at any time.

## 4.2 Management Summary

The bidder must provide a concise management summary of their offering, including the following:

1. A brief overview of the proposed solution including reference to any partners and third parties.
2. Reasons why NML should choose the proposed bidder and solution.
3. Summary of the bidder’s commercial offer.

## 4.3 Company Background

### 4.3.1 Company Details

The bidder must provide the following information:

1. The registered name and address of the company
2. Details of any holding companies
3. The date the company was established
4. The main activities of the company
5. The proportion of the total business accounted for by the proposed services
6. The number and location of offices, identifying the main functions of each
7. Insurance details (Professional Indemnity cover, Employers Liability cover, IPR cover)
8. Company accreditations (professional body accreditations and trade body accreditations but excluding awards)
9. Certifications and last audit dates, e.g. ISO9000 / 9001
10. An organisation chart that highlights those functions that would be involved in the delivery and subsequent support of the proposed services
11. The quality assurance mechanisms employed by the bidder
12. Describe any recent mergers or acquisitions
13. Detail any significant partnerships that will be used to deliver the proposed services. Detail the specific nature of each partnership and describe the commercial and contractual implications

### 4.3.2 Financial Information

The bidder must provide audited accounts for the last three financial years. If the organisation has not been in existence for three years then supply all available accounts.

### 4.3.3 Third Party Services

The bidder must provide the following information for each of the proposed third parties / sub-contractors that may form part of the proposed solution to this tender:

1. Service
2. Supplying bidder name
3. Product name / version
4. List of relevant clients where the bidder has provided that service

### 4.3.4 Relevant Experience & Performance

The bidder must provide evidence of previous experience in relation to expertise required and performance in completing past projects to the required standards.

As part of the selection process NML will require to contact existing customers of the bidder for similar solutions. The bidder must select 2 reference clients and provide the following contact information:

1. Client name and address
2. Description of solution provided
3. Key contact name, title, and contact information
4. Length of the supply relationship
5. Relevance to this tender
6. Size and duration of project
7. Role of the tenderer
8. Performance, in relation to time, budget, claims, project management and value of the solution.

NML undertakes not to contact any reference company without arranging such contact via the bidder’s Account Manager first.

### 4.4 NML Procurement Protocol

As part of the NML Procurement protocol and procedures, NML expect suppliers to uphold similar business standards, particularly in relation to sustainability, ethics and the Modern Slavery Act. NML will require potential bidders to agree to NML’s Procurement Protocol and their agreement to uphold those values. Please review the enclosed document:

i) Appendix B – NML Procurement Protocol

Please complete and return the NML Procurement Protocol Supplier Agreement.

### 4.5 Timetable

Please note that the project must be completed by 30th March 2020.

Bidders should present a detailed timetable for planning, installation and completion for the project as a whole, indicating how this date will be achieved.

## 4.6 Contractual Considerations

The bidder must provide a copy of their standard Terms and Conditions for the proposed services.

**4.7 Costs**

A full breakdown of all costs is to be provided. One off costs and continuing running costs should be clearly distinguished. Please provide details of any potential extra costs..

As an exempt charity and an educational institution funded by government (DCMS), NML generally qualifies for academia, educational or charity pricing schemes offered by many bidders and manufacturers and this must be taken into account when tendering.

**4.8 Summary of Documents to be returned as part of Submission**

Bidders are required to provide the following completed documents as part of their tender return, if a bidder fails to return the below items the tender submission will be considered invalid:

* + 1. Form of Tender
		2. Pricing document - Cost breakdown
		3. Management summary answers (section 4.2)
		4. All requirements referenced in point 4.3
		5. Confirmation of Delivery dates/Programme
		6. Detailed specification of proposed solution
		7. Acknowledgement of NML Procurement Protocol form
		8. Standard Terms & Conditions

|  |  |
| --- | --- |
| Requirements Specification  |  |

The overall project requirement is to supply, install and configure a new SAN solution for Disaster Recovery purposes. Additionally NML would like the provider to ensure that the new storage system, once configured, is validated to comply with any Dell support requirements.

The specific requirements of the project include:

* A SAN solution providing at least 50Tb of usable storage. This 50TB should not include any assumptions on de-duplication of data. If deduplication is proposed we want any calculation storage space saving to be additional to the mentioned 50TB of usable space. A vast amount of NML data are .jpg files.
* Connection to be via iSCSI (not fibre based SFPs).
* The solution must integrate with Hyper-V and Windows Server 2012R2 and 2016.
* The performance should give a significant increase in terms of IOPS and response time compared to the current Equallogic equipment.
* Actual performance metrics we can utilise to see if it’s behaving as it should (ideal if can provide VM level metrics). These need to be live and capable of generating reports for analysis.
* Resilience - Redundant architecture to mitigate against any single hardware level failure
* The solution must have an easy to use GUI management interface.
* Maintenance, a proven support company and matrix with a quick turnaround on faulty hardware, or a spare hardware kit on-site. Easy access to (free) firmware upgrades and ideally notifications of ‘best practices’ or recommended releases. A quarterly review meeting and report would be required.
* The provider must provide adequate training and full documentation to National Museums Liverpool staff to ensure that they fully understand the solution and are able to manage and administer the solution.

# We are open to costings being provided for better network switching for the SAN connectivity i.e. 10GB Ethernet (not SFP fibre) based switch. Along with 6 x dual port 10GB Ethernet NICs (that should connect the DR nodes to the recommended switch and therefore SAN). However, these items should be listed as a separate itemised costing from the main SAN appliance, just to ensure no confusion over equipment costs.

# The scope of work for the contract includes but is not limited to the following:

* A SAN Solution to replace the current Equallogic
* All necessary hardware is to be supplied. Details are to be provided of all necessary interfaces to ensure the equipment will work. NML may choose to purchase these separately or request the successful bidder to provide.
* Training for technical staff
* The equipment required for this project is to be integrated into an existing rack, care should be taken to not disturb the current system or render it inoperable during installation.
* All contractors must work alongside the National Museums Liverpool IT Technical Team, passing on full information on actions.
* Provide to NML; all documents, records of appropriate tests, certificates, operation manuals, software, etc.
* Full configuration, commissioning and testing of solution

**5.1 Installation**

The tender submission should clearly detail the project management methodologies applied to the installation and configuration of the network. Any costs associated specifically to project management should be clearly specified. Detailed project plans should be provided to evident how the required completion date will be met.

The tender submission should clarify the installation process.

The supplier will be responsible for installation and testing of the network and will ensure that the network is fully operational. Suppliers should include details of planned testing procedures.

**5.2 Support/Maintenance**

It is NML’s preference that support for the hardware and software is provided by the providers of the solution, rather than a third party provider. If the third party provider can provide evidence of successful support of the product with multiple customers then we will consider.

The service will include effective issue management with prompt customer notifications all bound within a clear Service Level Agreement, minimising impacts on service.

This document details baseline requirements for the new system. This is not meant to be an exhaustive list of requirements but it will however serve to identify suitable solutions and bidders. NML reserves the right to modify its requirements at any time.