| A large H to the left with text reading Horniman Museum & Gardens to the right, all in black. | Unified Communications Integration- Invitation to Tender |
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## Invitation to Tender

The purpose of this document is to invite tenders for a single contract to design, implement and support to adoption an integrated unified communications (UC) solution. The solution will include integration with Microsoft 365 Teams, Outlook and SharePoint, but other elements may be included. The solution will include a call time package of international, national and internal VoIP telephony, as well as supporting video meetings/conferencing, SMS messaging and internal messaging ‘chat’. The requirements are set out in detail below.

## Background

### The Horniman Museum and Gardens

The Horniman Museum and Gardens is an inspiring, surprising, family-friendly, free attraction in South London's Forest Hill. The Horniman has been open since Victorian times, when Frederick John Horniman first opened his house and extraordinary collection of objects to visitors. Since then, the collection has grown tenfold and includes internationally important collections of anthropology and musical instruments, as well as an acclaimed aquarium and natural history collection.

The Horniman is a medium sized Museum with around 150 staff. For the purposes of IT and telephony these can be divided into three equally sized (approximately 50 in each) groups by desk/computer time, high, medium and low with high desk timers spending over 2/3 of their time at their desk/computer, medium users less than 2/3 but more than 1/3 and low users spending less than 1/3 of their time at a desk/computer.

The Horniman has two sites, one in Forest Hill where the public museum and the majority of staff are based, and another in North Greenwich where the majority of the museum’s collections are stored and made available for research. Approximately 12 staff are based at this North Greenwich site, with others visiting frequently or occasionally.

By common measures of institutional complexity the Horniman is a complex organisation having a high number of small teams focussed on a very wide range of activities and outcomes. Very few roles are replicated, with a high degree of IT and communication requirements and behaviours specific to a single team or role.

Staff and team communication patterns vary widely. For the purposes of this tender the most significant variant is the degree to which a member of staff or team has telephone communication outside the museum. Some teams are highly public facing, while others will communicate almost exclusively internally.

### UC Journey so far

From approximately 2011 the Horniman used an ISDN PSTN connected PBX system with an isolated PBX at each of its two sites. By 2020 this system was out-of-support, unstable and difficult to maintain. The Horniman suffered a number of complete telephone outages and persistent configuration failures.

Between 2015 and 2020 plans were made to move to a Skype for Business VoIP solution, but this plan was never implemented. In the course of this plan 100+ Polycom VVX300 handsets were purchased.

In 2021, with the need for a functioning telephone system now critical, the decision was made to procure a VoIP telephony solution as soon as possible. Following a review of the market that included presentations from a dozen software/platforms, suppliers, and service providers, consultation with the museum sector, and consultation with a technology consultancy hired to aid the general improvement of IT provision at the Horniman, a UC solution was selected and procured on a year’s trial basis. A waiver from tender was secured as this short term trial contract came in under the tender threshold for public bodies. This contract has been renewed, again under waiver, until November 2023

A short term contract only was secured for two main reasons:

* A UC system implied new possibilities and new ways of working that the Horniman did not feel qualified to scope or assess without any similar experience
* The Horniman planned to procure a Microsoft 365 tenant account, but had not yet done so, so had no access to Microsoft Teams or Outlook 365 to test integration between any UC and these, or to evaluate if Microsoft Teams could provide a complete UC solution including telephony

The Horniman’s current UC licencing and minutes is:

* 106 Standard User accounts including Telephony, Video meetings and Chat function, each with 750 toll free telephony minutes (pooled across the institution)
	+ 13 User accounts have been issued with a handset
* 28 Limited Extensions/Common Area Phones

Additional details of current package and usage can be made available upon request.

## Microsoft 365

The Horniman has now procured a Microsoft Not-for-Profit tenant account and has synchronised its on-premises Active Directory to Azure AD. An instance of SharePoint 365 online has been deployed.

An integration between the current UC system and MS Teams, Outlook etc. has not yet been attempted.

While the UC system general ‘works’ and has reduced costs considerably, there are issues with it that applicants for this contract will be asked to address. See details of the scope of the contract below.

### Network

The Horniman network is built on on-premises HP storage and virtualised servers. While some services and systems are now cloud hosted, the Horniman is in the process of exploring a general move to Azure hosting for its data and core services at some point in the next few years.

The Horniman Microsoft Exchange server is currently on premises, but will be cloud based Exchange 365 by the time of the implementation of this contract.

End User points are a mixture of Horniman provided and configured base units and laptops operating on Windows 10. Staff are permitted to use their own devices from off-site, and policy is being developed to both reduce and to better manage this. The Horniman does not provide staff with mobile ‘phones, and does not have in place an agreement with staff that the Horniman can expect staff to use their own mobile phones, so although some staff have chosen to add the current UC system’s App to their personal mobile ‘phone, any solution offered cannot rely on the availability of mobile phone Apps.

## Objectives

The objectives of the contract are:

* To design and implement a cost effective unified communication environment suitable for a wide range of complex business needs
* To provide training and support for both a small group of administrators and the Horniman Staff body such that the Horniman gets best use of the environment as built

## Requirements

Applicants should provide, and will be scored on:

## Finance (40% of score)

Applicants should provide clear costings for:

1. The initial and annual cost of all licencing, including any additional Microsoft licences, based on the assumption that:
	1. The 106 Horniman Staff that have current UC licences have been assigned a Microsoft Not-For-Profit Business Standard licence (these MS licences should not be included in the quote)
	2. Licence agreements and other costs should be for 3 years
2. A bundle/package of telephony minutes, international and national
3. Horniman Admin/IT team training
4. End User training
5. Design and implementation costs

The Horniman is an Arm’s Length Body (ALB) of the UK Government Department of Culture, Media and Sport (DCMS) and a Public Trust, so it goes without saying that our financial resources are limited and that our services to the public are given financial priority. Value for money will be a significant factor in our considerations of applications.

## User Experience (40% of score)

1. Applications should include a description of the role that Microsoft 365 tools, especially Teams, Outlook, and SharePoint will play in their solution.
	1. Will staff be able to initiate:
		1. A voice call
		2. A video call (scheduled as a Meeting or immediate)
		3. Messaging/chat

From each of these Microsoft tools?

* 1. Applications should state whether their solution will support Hyperlink/URLs, including to on-premises UNC locations, as opposed to the attachment of files
	2. Applications should address the persistence and retention of in-meeting chat across web and desktop applications
	3. Applications should address how incoming calls may be auto-routed between users, teams and unassigned handsets
1. Applicants should provide descriptions of how the Telephony Use Case Scenarios will be serviced. See Appendix 1 below.
2. Applicants should describe how they will ensure the optimum quality for voice and video calls, including:
	1. any analysis or potential adjustments to network settings
	2. ensure consistency of connection
	3. reduce echo and other distortions currently commonly experienced
3. Applicants should state where handsets, headphones or other peripherals fit in their solution, including whether they will use the Horniman’s holding of VVX300 handsets.
	1. Applications should address the issue of how does a staff member know that there is an incoming call? The majority of staff do not receive enough calls to warrant consistently wearing headphones.
	2. Applications should address how/if incoming call paths can be created that include unassigned, Common Area, handsets. The use case that our current set up does not service well is staff that split their time between a desk and non-desk (workshop, store, etc.) spaces where common handsets are located. It is a specific requirement that calls can be set to be re-directed when unanswered from a user account to a common area handset, and between common area handsets.

## Training (20% of score)

1. Applications should describe a training approach for training:
	1. system admins
	2. end users
2. The training plans should include:
	1. The degree to which the training will be bespoke to the Horniman, which is preferred if it can be offered at a reasonable cost
	2. The types of learning to be offered
	3. The retention and re-usability of the training materials

## Project Participants

* Head of Knowledge and Information Management: **Jonathan Whitson Cloud** (Project lead and principle contact for tender) - jwhitsoncloud@horniman.ac.uk
* Horniman Digital Transformation Group (DTG)

(Project oversight)

* Director Finance and Corporate Affairs: **Paula Thomas**

(Tender evaluation and member of DTG)

* Network Manager: **Thomas Dakin**

(Technical evaluation)

## Tender Response

Formal tender submissions must be received by ~~12pm (noon) Friday 2 June 2023~~ **12pm (noon) Friday 9 June 2023** (extended as of 18 May). Tender submissions should be made electronically to Jonathan Whitson Cloud (jwhitsoncloud@horniman.ac.uk). We do not expect hardcopy submissions.

Documents may be sent in MS Word or PDF format. Video presentations of under 5 minutes in duration are also welcome, but are not essential. Contact Jonathan for assistance in transferring large files. Receipt of submissions will be acknowledged by email.

Should a second round of assessment be required this will be by presentation (online or in person) on 19 and/or 20 June.

## Supplier Selection

Tender responses will be evaluated on the basis of

1. Meeting tender/programme Requirements above.
2. Proposed method statement and understanding of risks
3. References
4. Relevant experience including especially:
	1. Previous experience of providing an integrated Unified Communication environment to publicly funded organisations of similar scale and complexity as the Horniman.

Tender responses will be evaluated by Jonathan Whitson Cloud, Paula Thomas and Thomas Dakin. We aim to appoint the contract during the week commencing 3 July.

## Structure of tender submissions

Please include all these items, ideally listed as below:

1. Your Details, including:
	1. Details of your company history and profile, with financial information (including the last two years sets of accounts) and environmental policy.
	2. A suitable single point of contact for all correspondence relating to the tender, including email address, postal address and telephone number(s).
	3. Details including contact information for any sub-contractors you would plan to use
2. Proposed method statement and outline programme of work, including explicit responses to the Requirements as set out above
3. Statement of Costs and Fees, which should be quoted ex-VAT

## Contract award

Suppliers and those organisations looking to bid for public sector contracts should be aware that if they are awarded a new contract with a publicly funded body, the resulting contract will be published. In some circumstances, limited redactions will be made to some contracts before they are published in order to comply with existing law and for the protection of national security.

## Contract Terms and Conditions

The Horniman’s **Standard Terms & Conditions of Purchase for Goods and Services** are available on our website here: [Procurement - Terms and Conditions](https://www.horniman.ac.uk/about-the-horniman/opportunities/procurement/)

## Appendix 1 – Telephony Use Case Scenarios

### IVR/Reception/Security

A member of the public has an enquiry regarding a Horniman event. They call the Horniman’s ‘main’ public number and are answered by an IVR which offers them the option to select the Events team, which they do. The call is passed to the events team (see below). No one from the Events team is available to take the call. The caller is offered the options of leaving a message, or returning to the IVR ‘main menu’. They select return and this time do not select an option so the call is passed to the security team, which also act as telephone receptionists. The caller explains they have an urgent enquiry. The security team are able to look up the number for, and re-direct the call to the ticket desk.

The IVR has options for pre-recorded information and for re-directs to the most public facing teams. The IVR options change depending on the time of day and the day of the week. The IVR is managed by Visitor Experience team who make regular changes to it.

### Events Team

The Events team has two members of staff, one a manager and one a co-ordinator. Both are part time. The manager works Monday to Wednesday, the co-ordinator works Wednesday to Friday.

The Events team receive a large number of calls from the general public.

A member of the public is directed to the Events team from the ‘main’ IVR. It is a Monday so the call is initially routed to the manager. The manager however is on another call, so the caller is offered the option to leave a message, or to return to the ‘main menu’.

Another caller calls the publicly available Events number. It is a Wednesday. The call is initially directed to the co-ordinator, who is away from their desk so the call is re-directed to the manager, who is on another call. The caller leaves a voice message. Both the manager and the co-ordinator are notified of the voice message by email and either are able to listen to the message. Either the manager or the co-ordinator can at any time see which voice messages have been listened to. Either can re-set the status of a voice message to un-listened to.

### Collections Team

The collections team consist of seven members of staff. They have a base office at the North Greenwich ‘SCC’ site but some or often all of them may be in the SCC stores or in the stores or galleries at Forest Hill. Two of the team are part time.

A member of the curatorial team at Forest Hill wishes to speak to someone at SCC. They do not mind who they speak to. They call the SCC extension. A handset rings in the Collections team office, but it is not picked up. The call is re-directed to all the handsets in the SCC stores (six handsets across three floors). One of these is picked up.

A member of the exhibitions team at Forest Hill wishes to speak to particular member of the Collections team. They do not know where the person they are calling is working that day. The collections team member is working in a gallery at Forest Hill. There is a handset in the gallery. The collections team member has re-directed their calls to the gallery handset so when the exhibitions staff member calls them that handset rings and they are able to pick up the call. If they were not able to pick up the call it would go to either the voicemail of the called member of the collections team, or to a colleague.

### Front of House teams

The Ticketing and Retail team and the Visitor Experience team work together as the Front of House (FoH) team. They are positioned at points around the public spaces of the Forest Hill site. They receive calls from the public, usually via the main IVR but also from staff directly to the extension of handsets situated at the front ticket desk, at various retail points, and in the public galleries. Front of House staff do not have personal UC accounts. Public calls are fielded by the ticket desk which has a generic UC account and may be logged into by any member of the team. Calls to specific members of staff are redirected from the ticket desk to the handset where the FoH staff member is known to be positioned.

### The Formal Learning Team

The formal learning team has seven members of staff, with diverse responsibilities. They have a base in the CUE building at Forest Hill but are as likely to be out teaching either in the museum learning spaces or off-site. Several members of the team are part time. The team take their own bookings for learning sessions from schools and other institutions. Bookings are the main responsibility of one member of the team, but others assist when that staff member is not available.

Internal and external calls are routed differently.

All calls from external numbers, or directed to the team from the main IVR, are sent to a call queue which first attempts to connect with the bookings officer, and then tries other available team members in an order set by the team. The order may change daily or hourly. Unanswered external calls are directed to a shared voicemail box, which sends notifications to all team members and which all team members can access and manage.

Internal calls that are not made to a User account go to a different call queue. Again the order of this changes often but the usual first number called is the team manager. This internal call queue again has a shared voicemail box.

Calls to individual members of the team’s user accounts can be redirected to other team members, or if they are teaching on-site, may be redirected to a handset at the location where they will be teaching.