



Invitation To Tender IP Telephony System

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Contents

1- Introduction

2 - Existing Configuration

3 - Requirements

4 - Additional Desirable Requirements

5 - Notes

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

1- Introduction

On the 1st Apr 2011 the Scottish Crop Research Institute (SCRI) based at Invergowrie, Dundee, and the Macaulay Land Use Research Institute (MLURI) based in Aberdeen, will merge to become The James Hutton Institute. The James Hutton Institute will be one of the biggest research centres in the UK and the first of its type in Europe. It is envisaged that operations will continue at both sites for the foreseeable future.

As part of the merger, it has been decided that both existing organisations will utilise a single telephony system. The Aberdeen site have already moved to an IPT solution and the Dundee site are currently using an analogue system, so we have decided to retain the Aberdeen equipment, and upgrade the Dundee site to be fully compatible and integrated with it's sister site in Aberdeen, to provide a single, integrated unified communications infrastructure.

2- Existing Configuration

SCRI is home to approx 500 scientific and support staff who are all computer and telephone users.

SCRI currently utilise a Siemens DX PBX connected to an ISDN 30 provided by Amcall. External PSTN connectivity will continue to be provided by the ISDN 30. The Siemens DX and ISDN are sited in AB Block in a dedicated exchange room and we envisage that the ISDN link will remain there. Some analogue lines will still be required. Currently we provide approx 350 telephone extensions which are run over the Cat 6 infrastructure.

SCRI operates a LAN infrastructure spread over approx 23 buildings utilising Cat 6 Ethernet at 100Mbps, connected using fibre optic cable at 2Gbs to a central Cisco 6504 switch which is located in the main Computer Room in E Block. The edge equipment consists of a mixture of predominantly Cisco switches with some 3com and Cabletron devices. Both sites will be moving to a single Directory Service as a separate project but within the same timeframe. The existing cabinets/switches are in Appendix A and a site map is provided in Appendix B

SCRI and MLURI have a VPN connection set up between both sites which operates over JANET (the Joint Academic Network) and provides 100Mbps connectivity. Information on the existing MLURI configuration can be found in Appendix F.

3 - Requirements

The Aberdeen site currently operates using a Cisco VOIP solution and any solution presented must be 100% compatible and operationally identical with identical features, to ensure that existing staff expertise at Aberdeen can be utilised once the system is installed, staff experience across the two sites is identical and cross-site redundancy is maintained for DR purposes.

Upgrades to the SCRI network infrastructure are required to facilitate the VOIP solution and we are also looking to replace the 3com and Cabletron devices.

We hold spare equipment (Cisco PoE & non PoE switches) which we would be looking to utilise for this project. Locations where no IP phones will be deployed but require a technology refresh will utilise the non-PoE Cisco equipment currently held as spares. The list of equipment held in store but likely to be utilised for this project is:-

Make	Model	Qty	Ports	PoE
Cisco	3750	3	48	YES
Cisco	3750	4	24	YES
Cisco	3750	3	24	
Cisco	2950	1	24	
Cisco	3560G	2	24	YES
Cisco	2960TT	1	24	
Cisco	2960TC	1	24	

To fit in with current and future network strategy, the supplier must provide Cisco Catalyst 3750 PoE or 100% compatible equipment, mainly to provide full stacking capability with existing infrastructure.

SCRI will be looking to 'trade-in' some existing equipment. The schedule for this is included below. Please include the trade-in values for the following equipment in the pro-forma (Appendix C) .

3COM	3300	9
3COM	3300SM	7
3COM	3300XM	6
		22

All server/switching equipment must be suitable for connection to one or more 240 volt 50hz UK mains power supply. Any plugs etc. supplied must conform to the relevant UK and EU regulations.

All equipment must be genuine branded equipment, sourced within the uk (no 'grey imports')
OEM products are not acceptable.

A Schedule of rates for equipment (Appendix C) is provided, however suppliers wishing to submit alternative technology must provide a similar breakdown on a like for like basis.

The supplier must configure the existing infrastructure to accommodate the new system.

The supplier will be required to supply, install, configure and provide training for all equipment (as per Appendix D).

There must be a capability for all staff to have Direct Dial Inbound (DDI) numbers

Suppliers must ensure resilience features across all call management, call routing, voicemail, attendant console etc. between the Aberdeen and Dundee sites.

Costs for extra and additional items and services must be guaranteed by the supplier for the duration of the contract.

The project must be completed by 21st March 2011 at the latest.

4 - Additional Desirable Requirements

The supplier should have the highest level of accreditation awarded by the manufacturer of the submitted technology (e.g. Cisco Gold partner etc.) and should be accredited specifically in unified communications and routing and switching. Details should be provided.

The supplier should have already performed IPT projects at a research or higher education establishment in the UK.
Details of 2 reference sites should be provided.

The suppliers must provide PRINCE2 qualified project managers for the overall management of the project.

We may purchase as part of the project additional UPSs to ensure that the edge equipment stays operational in a power failure situation.
Please ensure that any quoted UPS in Appendix C is capable of 10-15 minutes of operation.

What, if any, added value will the supplier provide to SCRI/MLURI Institute during the contract term? If the supplier has services or offerings relevant to SCRI/MLURI that in their opinion add extra value, these should be clearly identified under 'Added Value'.

5 - Notes

The tenders will be scored on a 50:50 percentage basis of 50% price and 50% quality of proposal, including any value added information.

For further information or clarification please contact, preferably by email in the first instance:-

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Appendix A

Location and Current switch details

Building	Make	Model	Qty	Ports	PoE	Phones
E Block	Cabletron	Smart Switch 6000	1			56
E Block	Cisco	C6504-E WS SUP720-3B	1			
E Block server room	Cisco	3560 G	1	24		
E Block server room	Cisco	3550	1	12		
E Block server room	Cisco	3560 G	1	24	YES	
E Block server room (Kingsway)	Cisco	3550	1			
E Block stack	Cisco	2960	8	24		
E Block	3Com	9100	1	6		
A Block	Cisco	3750	4	24	1 switch	67
B Block	Cisco	2960	3	24		
C Block	Cisco	3750	1	48	YES	10
D Block Lower	Cisco	2960	6	24		74
D Block	Cisco	6504-E SUP32	1			
D Block Upper	3Com	3300sm	1	24		
	3Com	3300xm	1	24		
	3Com	3300sm	1	24		
F Block	Media convertor					
H Block	Cabletron	SEH-24	1	24		3
X Portacabin	3Com	3300xm	1	24		14
	3Com	3300sm	1	24		
LF Portacabin	3Com	3300	1	24		
AP Glasshouse	Cisco	2960	1	24		7
AN Glasshouse	Cisco	3750	1	24		4
AO Glasshouse	Cisco	2950	1	24		6
MRS portacabin	Cisco	3750	1	24	YES	8
W Block (prev. O block)	Cisco	2950 G EI	1	24		3
AM portacabin	Cabletron	SEHI24	1	24		
AI portacabin	Cisco	2950	1	24		
AJ portacabin	3Com	3300	1			
L Block	3Com	3300sm	1	24		4
M Block	Cisco	2950 G EI	1	24		11
R Block	Cisco	2950 G EI	1	24		2
S Block	Cisco	2950	1	48		14
	Cisco	2950	1	24		
V Block	Cisco	2950	1	24		14
	Cisco	3560	1	24	YES	
AF Block	3Com	3300	1	24		27
		3300	1	24		
		3300xm	1	24		
		3300xm	1	24		
Building G	no existing hub					1
AG Block	Door access only					3
Total						328

Appendix B

Site Plan



May 2010

Appendix C

Schedule of Rates – To be completed by supplier

Description	Qty	Unit	Total
LAN			
Catalyst 3750 24 10/100 PoE + 2 SFP + IPB Image (or 100% compatible technology) OPTIONAL 10/100/1000	15		
GBIC / SFP modules SX (or 100% compatible technology)	15		
Trade- In value of existing kit (3 Com)	1	1	
Total			

Description	Qty	Unit	Total
Core Equipment			
Unified CM 8.0 7825-I4 Appliance(or 100% compatible technology)	2		
Voicemail			
Cisco Unity Connection MCS 7825 IBM Appliance(or 100% compatible technology)	1		
Total			

Description	Qty	Unit	Total
Licenses			
Unified Workspace Licensing, Professional - 1 user(or 100% compatible technology) which would be in addition to licences already held in Aberdeen	350		
Unified Workspace Licensing, Standard - 1 user(or 100% compatible technology) which would be in addition to licences already held in Aberdeen	150		
Analog, non-app device add-on for UWL(or 100% compatible technology)	24		
Total			

Description	Qty	Unit	Total
Handsets			
Cisco Unified IP Phone 7945, Gig Ethernet, Colour(or 100% compatible technology)	100		
Cisco Unified IP Phone 7942, Gig Ethernet, Grey Scale(or 100% compatible technology)	250		
Cisco UC Conference Station 7937 Global(or 100% compatible technology)	4		
Cisco Unified Enterprise Attendant Console (Reception) (or 100% compatible technology)	2		
Total			

Description	Qty	Unit	Total
Voice Gateway			
2821 Voice Bundle,PVDM2-32,SP Serv,128F/512D(or 100% compatible technology)	1		
Total			

Description	Qty	Unit	Total
Analogue Gateway			
24 Port Voice over IP analogue phone gateway	1		
Total			

Description	Qty	Unit	Total
WebEx			
WebEx External Port Add-on(or 100% compatible technology)	8		
Total			

Description	Qty	Unit	Total
Call Logging			
Datatrack Call Logging Solution for 350 users at SCRI(or 100% compatible technology)	1		
Option - add on MLURI 350 users(or 100% compatible technology)	1		
Total			

Description	Qty	Unit	Total
UPS			
Option – UPS to power 48 port edge PoE switch	24		
Total			

Support costs

Core – 8x5x4 with onsite engineer

• <i>Core Equipment</i> (as per above)	Qty	£
• <i>Voicemail</i> (as per above)	Qty	£
• <i>Voice Gateway</i> (as per above)	Qty	£
• <i>Analogue Gateway</i> (as per above)	Qty	£

Edge – 8x5Xnbd hardware advance replacement only

• <i>LAN</i> (as per above)	Qty	£
• <i>Handsets</i> (as per above)	Qty	£

Software Support

• <i>Licenses</i> (as per above)	Qty	£
• <i>Reception Console</i> (as per above)	Qty	£

Appendix D

Professional Services - To be completed by supplier

It is expected that precise time requirements will be confirmed after discussion with the supplier as part of the Detailed Design phase however the supplier should estimate their requirements and provide appropriate costs for the project.

Design	DAYS	COST
<ul style="list-style-type: none">Detailed Low Level Design (LLD)	Qty	£
Installation		
<ul style="list-style-type: none">New LAN Switches	Qty	£
<ul style="list-style-type: none">LAN switches held in the stores	Qty	£
<ul style="list-style-type: none">IPT Servers	Qty	£
<ul style="list-style-type: none">Application Servers	Qty	£
<ul style="list-style-type: none">Roll out of the IPT Handsets	Qty	£
<ul style="list-style-type: none">Provision for go-live support	Qty 3Days	£
Testing		
<ul style="list-style-type: none">Testing required of all new hardware and software	Qty	£
Integration		
<ul style="list-style-type: none">Integrate with Macaulay	Qty	£
Project Management		
<ul style="list-style-type: none">Project Management(to be provided throughout the project.)	Qty	£
Handover Documentation		
<ul style="list-style-type: none">Full design handover documentation	Qty	£
Training		
<ul style="list-style-type: none">Admin – day to day systems admin	Qty 2Days	£
<ul style="list-style-type: none">User – End user handset and application training	Qty 3Days	£

Appendix E

Supplier Questionnaire - To be completed by supplier

Background Information

Name of organisation	
Address for all correspondence	
Contact name and position	
Telephone number	
Fax number	
Email address	
Website address	
Address of registered office:	
Number of employees that the organisation has who can be involved with this project at a technical level.	
If the supplier is a member of a group of companies, please give the name and address of the parent company	

Financial Information

BANK DETAILS	
Name of Bank: (from which a financial reference may be sought)	
Address	
Telephone number	
Suitable contact name and telephone number (if different from above)	
What is your Company Registration Number (or alternative EU registration number)	
Is your Company VAT registered? If so please provide your VAT Registration Number (or alternative EU registration number)	
Provide details of the Annual Turnover (in £ Sterling for)	
Latest year	
One year previous	

Business Probity

Please confirm whether any of the following criteria applies to your organisation:		Please tick
Is the organisation bankrupt or being wound up, having its affairs administered by the court, or have you entered into an arrangement with creditors, suspended business activities or any analogous situation arising from similar proceedings under national laws or regulations?	YES	
	NO	
Is the organisation the subject of proceedings for a declaration of bankruptcy, for compulsory winding-up or administration by the court or for an arrangement with creditors or of any similar proceedings under national laws or regulations?	YES	
	NO	
Has any employee whom you would propose to deliver this contract been convicted of an offence concerning his professional judgement?	YES	
	NO	
Has any employee whom you would propose to use to deliver this contract been guilty of misrepresentation in supplying or failing to supply the information that may be required in this Section?	YES	
	NO	
Has any employee whom you would propose to use this contract been guilty of grave professional misconduct?	YES	
	NO	
Has the organisation failed to fulfil obligations relating to payment of social security contributions in accordance with the legal provisions of the United Kingdom or the country in which it is established?	YES	
	NO	
Has the organisation failed to fulfil obligations relating to the payment of taxes in accordance with the legal provisions of the United Kingdom or the country in which it is established?	YES	
	NO	
Has the organisation had a contract similar in nature to that being sought in this submission, terminated prematurely in the last 3 years? (if YES please provide details)	YES	
	NO	

Environmental and Quality

Please confirm whether any of the following criteria applies to your organisation:		Please tick
Does the organisation have any Environmental Policy and /or any other environmental initiatives? (if YES please give details)	YES	
	NO	
Does the organisation have ISO14001 accreditation or other environmental certificate?	YES	
	NO	
Does the organisation have a Health and Safety policy and/or hold any H&S accreditation? E.g. OHSAS18001? (if YES please give details)	YES	
	NO	
Does the organisation hold any Quality Assurance accreditation or policy? E.g. ISO 9001 (if YES please give details)	YES	
	NO	

Appendix F

MLURI UC details (the proposed solution **MUST** fully integrate with these)

Unified Communications	Hardware	Version	Other information
CUCM - Publisher	MCS-7825H3-K9-CMB1	8.0.2.400 00-1 (8.0(2c))	Features Extension mobility, call pickup, call park, call back, voice conferencing, hunt groups, music on hold LDAP integration with directory services
CUCM - Subscriber	MCS-7825H3-K9-CMB1	8.0.2.400 00-1 (8.0(2c))	Features Extension mobility, call pickup, call park, call back, voice conferencing, hunt groups, music on hold LDAP integration with directory services
UNITY CONNECTION Server	MCS-7825-H3-K9-UCA1	8.0.2.400 00-12	
CUEAC Server	Dell Optiplex7 80 Windows Server 2008	8.0.0.5	Enterprise Attendant console on reception PC running WinXP sp3
Presence Server	MCS 7825-I4-IPC1	8.0.2.100 00-30	CUPC8.x LDAP integration 25 Logitech 9000 HD usb webcams
MeetingPlace Server	MCS 78335-I3-RC1	8.0.1.3	EMS LDAP ingration to WebEx

Unified Communications	Hardware	Version	Other information
WebEx Node for MCS server	MCS 78335-I3-RC1	8.0.1.3	http://macaulay.webex.com/ WebEx cloud site
Voice gateways	VG2821	15.1(2)T	Two Gateways at Aberdeen, for 2 x ISDN-30 connections One Gateway at Glensaugh Research Station - ISDN02 service
	VG224	15.1(2)T	~18 active connections analogue port mappings for faxes, modems any analogue services night bells , lifts etc or phones where no data infrastructure.
Licensing	CWL- PRO 300 CWL-STD 100		UCSS and ESW contract MLURI upgraded from Device to Workspace licensing upgrade options meant no public or analogue licenses purchased.
Handsets	C7940 C7941G-GE C7971G-GE Ct945G C7971G		100 275 25 10 2