Report on data cabling in the Public Hall - updated 21.10.2021

Background

The Public Hall was previously served by two BT Fibre to the Premises (FTTP) broadband connections, one into the main Council Office and the other into the Public Hall via the Members' Room. Wildanet are providing access to free broadband in the Public Hall – this connection comes directly into the main Council office.   The two BT fibre to the premises broadband connections have now been terminated. The Wildanet connection provides us with minimum connection speed of 300Mbps, but potentially up to 1000Mbps.

The main issues that need to be addressed are around security, reliability, and maintenance. There is also a possible upgrade to the existing CCTV system and the potential to increase the number of power sockets in rooms where we are lacking.

Without the FTTP connection to the Public Hall a temporary fix is in place whereby the Wi-Fi access points are linked back to the FTTP connection in the main office. This provides an unreliable connection as the cables are joined over long distances and, in some cases, run externally. The access points themselves are old and a range of different makes and models which makes configuring them difficult. There is also a 'bottleneck' which means that we cannot achieve connection speeds of anything like 300Mbps. In the Public Hall current average download speed is 2.53Mbps and upload speed is 0.58Mbps.

Because the existing network has evolved over-time it is poorly labelled which makes tracing problems difficult and time-consuming. Most of the cabling both inside and out is unsightly, quite a lot of it is obsolete cabling from old telephone and alarm systems that has never been removed. The cables that run outside the building are not suitable for external use and are degrading. Cables are 'bunched' together with electrical and alarm cables. A suitable external conduit should be used to safely contain all cables and prevent degradation.

An invitation to quote was sent to seven contractors on the 12th April 2021 (see attached). Only two quotes were received, one for **£27,164.78 + VAT** and the other for **£21,205.92 + VAT**.

Both contractors have used the principle of creating a fibre cable 'backbone' with either two or three cabinets from which the data cabling will run to the individual access points with a provision for Wi-Fi access points (to be used mostly by visitors) and network sockets (PCs, printers, VOIP telephones, smart TV, CCTV, etc). Both contractors specified a VLAN type system that can be configured to a private or public network.

The Town Council's Financial Regulations stipulate that any contracts valued above £25,000.00 must be formerly tendered to comply with the Public Contracts Regulations, 2015. Contracts valued between £3,000.00 and £25,000.00 must have 3 quotes. Some further work was undertaken by the Facilities Manager and Chair of Facilities Committee to revise the specification and a second invitation to quote was sent on 13th July 2021 to three contractors, including the two who originally submitted a quote. There was only one submission received for the sum **of £20,651.59 + VAT**.

At the Facilities Committee Meeting held on 21st September 2021 it was resolved that:

*203 / 21 - **DATA CABLING** – The Committee discussed the cost benefit of undertaking a project of this size. The Facilities Manager was asked to investigate installing fibre to premises in each individual meeting room as an alternative to the proposed data cabling work. It was noted that a secure and reliable internet connection is required by staff (including the Cattle Market Makers Project), Councillors and hirers in the Public Hall side of the building as the Council operates a cloud-based administration and phone system. Councillor Kerry Cassidy proposed, Councillor Simon Cassidy seconded, and the Committee **APPROVED** that the matter of data cabling be dealt with at the next Town Council meeting on the 26 October 2021.*

Installing FTP in each meeting room
The cost of providing FTP to Foresters' Hall is £38.00 per month plus VAT.
So, based on this figure to provide separate Wi-Fi in each individual meeting room (no shared access) would cost £304.00 + VAT per month (annual cost of £3,648.00 + VAT). Plus cost of materials and labour to install cabling and configure the system, estimated at £2,000.00 - £3,000.00 + VAT.

Conclusion
The proposed data cabling solution will provide the Council and users of the Public Hall and meeting rooms with a state of the art secure and robust high capacity internet capability. The dual network will provide council staff and councillors with secure internet access and ensure that our data is not open to leakage and random hacking in line with our GDPR obligations. Public Hall users who require secure internet access will have high speed transmission upload and download available so that they can also have confidence they can maintain the maximum security and speeds appropriate to their usage.

We consider that this facility will widen the attraction of the Public Hall, particularly in the area of medical hirers requiring secure data access and transmission, that we have recently had - but who used our current system to its maximum capacity - and TV/Film hirers who have recently enquired and also require good internet service. It will also make the Public Hall more attractive to theatre and similar performance groups who rely more and more on downloaded content and special effects. Business and commercial customers should also find the Public hall more attractive to hire for conferences and meetings if they know that there is reliable, secure internet service available. Thus with this investment we are substantially increasing the pool of potential hirers.

Evidencing value for money on the basis of future income is always a little speculative, especially when we cannot be sure how much longer Covid will be damping demand, but in a good year we can expect some 200+ hiring days for the Public Hall alone – excluding the other meeting rooms - at around £243.00 per day. If as a result of implementing this investment we gain an additional 20 hirings (full day equivalents) then we are generating an additional £4,000 +pa income , a 20% return on investment and a payback of under 5 years. This before we consider additional hirings for other rooms. The intangible benefits, I have touched on above and we will be making the data infrastructure of the public hall complex fit for purpose in a digital world which will be upgradeable if necessary and able to adapt to new technology as it evolves in the world of things and internet space. I therefore commend this investment to Council.

Copy of the invitation to quote (sent 12th April 2021):

Good afternoon,

Liskeard Town Council is seeking quotes from suitably qualified and experienced contractors to replace data cabling and undertake associated works at the Public Hall, 3-5 West Street, Liskeard, Cornwall, PL14 6BW.

The Public Hall was built in 1890 and provides a venue for a wide range of community activities as well as housing the Town Council offices. The building underwent a major refurbishment in 2018 which saw much of the ground floor and first floor reconfigured and updated. A new semi-commercial kitchen and Changing Places facility were added at the same time. The Public Hall has six letting rooms as well as the main hall with stage and balcony. The main council office is located at one end of the building and there is a small office for the Facilities Team adjacent to the lobby. See attached plans.

The existing network cabling is no longer fit for purpose. The network has been developed ad-hoc over the years to provide internet connection (Wi-Fi and ethernet) to the various meeting rooms. This has led to poor or non-existent internet access in the Public Hall impacting on both the users of the Public Hall and Town Council staff.

There is currently one fibre connection into the office that serves the entire building. This connection is to be divided into two networks, one secure network for the Town Council and one 'open' network for users of the Public Hall. The successful contractor will be required to supply and install replacement network cabling (Cat6) in the Public Hall complete with patch panels, sockets, Wi-Fi access points, additional power sockets, ducting, and trunking. Whereas there is some flexibility on exact location of Wi-Fi access points, network sockets and ducting within each room this must be undertaken in consultation with the Facilities Manager <u>before</u> installation takes place. It is particularly important that any ducting installed in the Council Chamber and the main hall are as unobtrusive as possible.

All work must be clearly labelled and catalogued. All obsolete cables, sockets and other hardware must be removed as part of the contract and disposed of in-line with relevant regulations. All work should comply with the relevant Fire Regulations. The installation must be thoroughly tested before sign-off and handover.

*The deadline for receipt of quotes is **12 noon Monday 10th May 2021**. Quotes should be submitted via email to townclerk@liskeard.gov.uk Please enter 'CONFIDENTIAL - Quote to replace data cabling and undertake associated works at the Public Hall' in the subject heading.*

Please submit with your quote:

- *Risk assessment and method statement including Covid-19 protocol*
- *Details of membership of any professional or trade body*
- *Details of at least two referees*
- *Evidence of public liability and professional indemnity insurance*

To arrange a site visit please contact Jacqui Orange, Facilities Manager at facilities@liskeard.gov.uk or call 01579 245407 / 07926 571882.

Schedule:

Location	No. Network Ports Required	No. Wi-Fi Points Required	No. power sockets required	Notes
Emily Hobhouse Room	2no. 2 port sockets	1no. ceiling or wall mounted Wi-Fi access point	6no. double socket 2no. double socket in kitchen	
Mayor's Parlour	2no. 4 port sockets	1no. ceiling or wall mounted Wi-Fi access point	4no. double socket	Flexibility to create a temporary reception/office area.

Room	Network Ports	Wi-Fi	Power Sockets	Notes
Members' Room	2no. 4 port sockets	1no. ceiling or wall mounted Wi-Fi access point	2no. 4 socket	*Currently being used as temporary Facilities Office but possible future Mayor's Parlour/meeting room.*
Caretakers Office	N/A	N/A	N/A	*No extra network cables or power sockets required but consider installing an extra cable as a back-up. Consider relocating Rialtas server permanently to office*
Half-landing	N/A	*Possible 1no. ceiling or wall mounted Wi-Fi access point*	N/A	*Optional*
Council Chamber	4no. 4 port sockets. One port dedicated to the Smart TV.	1no. ceiling or wall mounted Wi-Fi access point	6no. double socket + connection to WC (to be converted into kitchenette.	*Already 2no. unconnected network sockets in the floor. Ducting must be unobtrusive.*
Quimperle Room	4no. 2 port sockets	1no. ceiling or wall mounted Wi-Fi access point	6no. double socket 2no. double socket for kitchenette	*The defib is connected via this room.*
Main Hall	16no. 4 port sockets (for conferences, exhibitions, etc)	1no. ceiling or wall mounted Wi-Fi access point	N/A	*Unobtrusive. Currently lots of high level power sockets for the lights.*
Balcony	1no. 2 port sockets for lighting and sound desk	N/A	2no. 4 socket	*No private network access needed.*
Stage	2no. 4 port sockets (one socket in each wing of the stage).	N/A	2no. 4 socket (either side of stage)	*Optional CAT5 (or 6) cable linking stage and balcony.*
Wheal Phoenix	3no. 2 port sockets	1no. ceiling or wall mounted Wi-Fi access point	N/A	
New Liskeard Room	2no. 4 port sockets	1no. ceiling or wall mounted Wi-Fi access point	4no. doubles + 2no. doubles for kitchenette	
Office	N/A	N/A	N/A	*New dado-style ducting all around for network cables and power sockets. Each workstation to have 4 network port sockets.*

Copy of the invitation to quote (sent 13ᵗʰ July 2021):
Liskeard Town Council is seeking quotes for suitably qualified and experienced contractors to undertake data cabling works to the Public Hall, 3-5 West Street, Liskeard, Cornwall, PL14 6BW.

Please note, this is a revised and updated specification based on an original brief published 12ᵗʰ April 2021

*The estimated value of this contract is IRO **£15,000 to £18,000 + VAT.***

Description of works:

1. *Provide wireless access points in all meeting rooms with higher power units to suit the larger rooms i.e. Emily Hobhouse Room, Mayor's Parlour, Chamber, Quimperle Room, Main Hall, Wheal Phoenix Room, New Liskeard Room.*
2. *CAT6 cabling throughout with a fibre link between new cabinets located at each end of the building (Public Hall and main office) with a CAT6 back-up link.*
3. *Physical network points in each room with extra provision in rooms that are to be used as temporary offices i.e. Mayor's Parlour and New Liskeard Room (24 in total). Also network points on stage and balcony and on the half-landing for possible upgrade to CCTV system.*
4. *Additional power sockets (48 in total).*
5. *Removal of all obsolete cabling and the re-routing and/or trucking of any external cabling*

Background:

The Public Hall was built in 1890 and provides a venue for a wide range of community activities as well as housing the Town Council offices. The building underwent a major refurbishment in 2018 which saw much of the ground floor and first floor reconfigured and updated. A new semi-commercial kitchen and Changing Places facility were added at the same time.

The Public Hall has six letting rooms as well as the main hall with stage and balcony. The main council office is located at one end of the building and there is a small office for the Facilities Team adjacent to the lobby.

The existing network cabling is not fit for purpose. The network has been developed ad-hoc over the years to provide internet connection (Wi-Fi and ethernet) to the various meeting rooms which has included running internal cables outside the building. The result is poor or non-existent internet access in the Public Hall impacting on both the users of the Public Hall and staff working from that side of the building.

There is currently one fibre connection into the office, this serves the Public Hall. This connection is to be divided into two networks, one secure network for the Town Council and one 'open' network for users of the Public Hall. Both networks are to be made available throughout the Public Hall via new patch panels, cabling, Wi-Fi access points and network sockets to provide as much flexibility and future-proofing as possible.

Additional information*:*

Your quotation should include the costs of supplying and installing replacement network cabling (Cat6) in the Public Hall complete with patch panels, sockets, Wi-Fi access points, additional power sockets, ducting, and trunking. Everything must be clearly labelled. All obsolete cables, sockets and other hardware must be removed as part of the contract and disposed of in line with WEEE regulations. Whereas there is some flexibility on exact location of Wi-Fi access points, network sockets and ducting within each room this must be approved by the Town Council <u>before</u> installation takes place. Please note, any ducting must be non-intrusive especially in Council Chamber and Main Hall.

The work should be completed by end of September 2021.

The fibre connection into the building is provided by Wildanet who also have their own hardware in the main Council Office.

An external defibrillator in Barras Place is connected to the network

A 30kW solar photovoltaic system was installed in 2015 (not currently connected to the network).

There is a separate fire and intruder alarm system.

There is scope to upgrade the current CCTV system within this contract.

The installation should not damage the fabric of the building. Any damage must be made good. All work should comply with fire regulations i.e. all gaps must be suitably fire-stopped.

The installation must be thoroughly tested before sign-off and handover.

The deadline for receipt of quotes is __12 noon Friday 23rd July 2021__. Quotes should be submitted via email to townclerk@liskeard.gov.uk Please enter 'CONFIDENTIAL - Quote to replace data cabling and undertake associated works at the Public Hall' in the subject heading.

Please submit with your quote:

- *Risk assessment and method statement including Covid-19 protocol*
- *Details of membership of any professional or trade body*
- *Details of at least two referees*
- *Evidence of public liability and professional indemnity insurance*

To arrange a site visit please contact Tony Misson (caretaker) on 01579 345407 / 07711 757382.