NEXUS
─ ASSOCIATES ─

School ICT Equipment Survey

Version 3

Astley Community High School

Elsdon Avenue, Seaton Delaval, Northumberland, NE25 0BP

Document Control

Version	Status	Date of Issue	Author
1	Template Completed	20th November 2019	Tim Mason
2	Survey Completed	21th November 2019	Tim Mason
3	Review for Release	3rd December	Simon Barclay
4			
5			
6			

Introduction

This document will be used to detail the schools approach to ICT, along with the equipment and services that are used and provides an overview of the legacy ICT for Astley Community High School, produced by Nexus Associates in partnership with Northumberland County Council (NCC).

The purpose of the on-site legacy ICT survey was to validate the ICT equipment currently deployed within the school and to gather an overview of age, condition and whether this equipment is suitable for deployment throughout any possible future developments.

Section 1: School/Federation Details

1.1 School details				
Name of School:	Astley Community High School			
Name of Federation:	Seaton Valley Federation			
Number of pupils (total when full):	Current	527	Capacity	821
Type/phase:	Secondary			
Age Range:	13-18			
Link to Further details: (School/Federation website)	https://www.svf.org.uk/			

Section 2: ICT for learning, teaching, management and administration:

2.1 Learning and Teaching Approaches	
	Additional detail (e.g. group size, frequency, curriculum information etc)
Whole Class	Standard class sizes of 30 students. Every classroom with teaching wall and teacher computer.
Small Group	SEN provision with ability of teaching small groups.
Collaborative Activity	Faculties laptop trolleys available. With mix of laptops and Chrome Books.
Independent Study	LRC and Sixth form independent. LRC 24no ICT devices. Sixth form 15no devices
Lecture Theatre or other large space	Dining Hall to be occasionally used For productions and every day morning assembly, large AV and sound system installed. Lighting bar available for production. Sports hall and gym and swimming pool – No ICT
Project-based Learning	N/A
Specialist Areas	6no ICT suits, Art and Music ICT Suits
Immersive Learning	N/A
Remote Study	Google Apps for Schools.

2.2 User Device Strategy – what is the approach you use for the user devices whether that be what you do with them or the reason why you do not use.	
Mobile Devices (e.g. tablet/laptop)	14no staff with Chrome books. 9no trolleys totalling 125no laptops. Not all functioning, due to physical damage etc. 12no iPads for SLT use (iPad 2)
Typical Classroom	Teacher machine Interactive Smart board with long throw ceiling mounted projector.
Typical Computer Suite	Teacher machine 30no student machines mix of Windows 7 and Chrome OS Interactive Smart board with long throw ceiling mounted projector. Printing provided by centralised solution.
Learning Resource Centre	Small number of desktops, mix of Windows 7 and Chrome OS
Bring Your Own Device (BYOD)	N/A
Local vs Cloud Storage	Combination of both.

2.3 Special Educational Needs and Disability (SEND)
A small number of teaching devices mix of Windows 7 and Chrome OS. 2no Interactive Smart boards with long throw projectors

2.4 Management and Administration: intended solutions	
Locally hosted services (e.g. MIS, Finance)	MIS Sims.net locally hosted PS Financials locally hosted
Cloud hosted services (e.g. MIS, Finance)	N/A
User ID strategy (e.g. Card/PIN/ Biometric)	**Cashless Catering** - Fingerprint recognition. Provided by CRB Cunningham's. Locally hosted. The biometrics software is provided by CRB Cunningham's. **Printing** - Paper Cut for administration of accounts Staff have ID swipe cards, students use AD credentials. Staff ID cards provided by building management.

Visitor Tracking	Paper based

2.5 Existing or intended Federation wide approaches	
Shared services	The school is part of a wider Federation. Shared services are in operation on the Elsdon site which incorporates Astley Community High School and Whytrig Middle School. Broadband, Servers, Telephone system, Printing and Cashless Catering are shared across both schools. A third school (Seaton Sluice) shares a broadband connection from the school via an Openreach fibre link., but no other services are provided.

Section 3: Technical Support and Contracts

3.1 Technical support arrangements
How is technical support provided? - In house; - Hybrid managed service; - Full managed service. Please include details of when this support takes place and if consideration is being given to any changes in these arrangements.
1no Network Manager, 1no ICT Technician shared across all 3 schools. Provided by the Federation. NCC provide support for MIS platform.
Provide contact details for the person to whom any technical queries should be addressed. This should be the person/company with the technical knowledge of the schools infrastructure.

Name	Alan Dennis
Job title	IT Technical Service Manager
Organisation	Seaton Valley Federation
Phone	07931750464
Email	alan.dennis@svf.org.uk
Located	Astley Community High School.

3.2 Lease agreement and contracts	
The school's current lease agreements/support contracts, including supplier, contact details and date of expiry of lease/contract.	
MFD	Total Business Group, PEAC are the incumbent supplier providing: 12no Xerox Desktop Printers 4no MFDs Toshiba Lease ends Summer 2023
Cashless catering	Cunningham's solution. Rolling 1 year contract.
CCTV	ADT maintained School IP CCTV and NCC maintained and monitored Public LRC IP CCTV
Telephone system	Deployed in Summer 2020 - Gamma Horizon hosted VoIP.

3.3 Technical Support and Contracts – Additional comments
IP based Access Control is maintained by ADT managed by the school. Management software is PAC Securenet.

Section 4: ICT Asset Register

4.1 Asset register		
Does the School have a maintained, current ICT Inventory / Asset Register that could be made available?		☒ Yes ☐ No
If YES	Who manages it?	Alan Dennis
	Date last updated?	June 2019 (PS Assets)
	File Format:	☐ Word processed ☐ Spread-sheet ☐ Database ☒ Specialist Application

4.2 Asset register – Additional comments

5. Server and Hub Spaces

5.1 Servers, network switches and the physical accommodation	
The existing locations of servers, network switches and the physical accommodation for these across all the school premises. Please return a logical network diagram with this summary.	
Do you have a server room? If yes, where is the server room located?	Yes – First floor reception area
What is the current floor area of the server room?	Combined ICT Office and Server Room
Where are core and edge switches located?	Server room, hubs rooms for edge
Is the server room secure? Is it lockable? Does it have an outside window? Does it have air conditioning?	Locked and window shutters. Air conditioned.
Is anything else installed in the server room other than the server and network equipment?	Doubles as office.
Does the server room have its own dedicated power supply?	No
Are the servers and switches installed in racking?	Yes.
If you have data/server cabinets, please specify the size of each cabinet and how many units are free	A number of different, some floor standing, some stacked 12U cabinets
Are the servers and core switches protected by a UPS?	Yes.
Is the server room temperature controlled e.g.? by air conditioning?	Yes.
What switches are located in the same room as the server(s)?	Yes

6. Internet Connectivity

6.1 Internet connectivity – Contract	
The school's broadband and internet connection	
ISP	Virgin maintained by Aspire.

Is the service purchased via a third party, trust, LA or RBC	Federation funds contract in house.
Infrastructure provider	☐ BT ☒ Virgin ☐ Other
When is the contract due to expire?	Installed March 2019.
Is the connection shared with any other school or service provider either locally or on site?	☐ No ☒ Yes Fibre link is shared across the 3no sites. Via Openreach fibre. 100mb/s link.

6.2 Internet Connectivity - Service	
Number of connections	☒ Single ☐ Main and backup
Connection Type	☐ Copper – ADSL/DSL/FTTC ☐ Fibre – FTTP ☒ Fibre – Leased Line ☐ OTHER If OTHER, please specify:
Connection Bandwidth (mb/s)	200
Site mobile data	☒ None ☐ 3G ☐ 4G

6.3 Internet Connectivity – Routing and termination	
Where does the connection enter the school site	Into the server room, down the main entrance to the site. **See appendix 1**
In which block does the connection enter the school buildings?	A Block
In which block is the connection terminated?	A Block
In which blocks does the connection pass through between entering the building and termination?	None

6.4 Internet Connectivity – Future works and upgrades		
Do the school have plans to upgrade or modify internet connectivity?	☐ Yes	☒ No
The scope of works and timeline		

6.5 Internet Connectivity – Additional comments
Public LRC has their own Openreach Fibre connection provided by NCC cabled in the same route as the federation connection. Terminated in the server room.

7: Passive Infrastructure

7.1 Passive Infrastructure – Main Building		
Block reference	BLOCK A	
What type of data cabling is used?	☒ Copper ☒ Fibre	
Connections to other building's	BLOCK B, SEN Bungalow, Whytrig School.	
What cable standard is in use?	Copper ☒ Cat 5 ☒ Cat 5e ☒ Cat 6 ☐ Cat 6a ☐ OTHER	Fibre ☐ OM1 ☒ OM2 ☐ OM3 ☐ OM4 ☐ OTHER
	If OTHER, please specify: …………………………………………	
Is certification or warranty available?	☐ YES ☒ NO If YES, when does it expire? ……………………………………… *Please attach a copy of the documentation*	

7.2 Passive Infrastructure	
Block reference	BLOCK B
What type of data cabling is used?	☒ Copper ☒ Fibre
What does it connect within the block?	BLOCK A

What cable standard is in use?	Copper	Fibre
	☒ Cat 5	☐ OM1
	☒ Cat 5e	☒ OM2
	☐ Cat 6	☐ OM3
	☐ Cat 6a	☐ OM4
	☐ OTHER	☐ OTHER
		If OTHER, please specify: ………………………………………

Is certification or warranty available?	☐ YES ☒ NO If YES, when does it expire? ……………………………………… *Please attach a copy of the documentation*

7.2 Passive Infrastructure	
Block reference	SEN Bungalow
What type of data cabling is used?	☒ Copper ☒ Fibre
What does it connect within the block?	BLOCK A

What cable standard is in use?	Copper	Fibre
	☒ Cat 5	☐ OM1
	☒ Cat 5e	☒ OM2
	☐ Cat 6	☐ OM3
	☐ Cat 6a	☐ OM4
	☐ OTHER	☐ OTHER
		If OTHER, please specify: ………………………………………

Is certification or warranty available?	☐ YES
	☒ NO
	If YES, when does it expire? ……………………………………
	Please attach a copy of the documentation

7.4 Passive Infrastructure – Future works and upgrades

Do the school have plans to upgrade or modify the passive infrastructure?	☐ Yes
	☒ No
If Yes, please provide detail of the scope of works and timeline	

7.5 Passive Infrastructure – Additional comments

8: Active Infrastructure – Switching

8.1 Switching - Configuration

Single or split networks for admin and curriculum	☒ Single ☐ Split
	1no single school network
	1no VOIP network.
Is the network flat or configured	☒ Flat ☐ VLANs
VLANs detailed	
Is a central management solution used?	☐ Yes ☒ No
If Yes, please detail	

8.2 Switching - Equipment					
Location (block, room / cabinet)	Type (Core or Edge)	Manufacturer	Model	End of Sale Date	Quantity
SERVER ROOM	CORE	HP	2530 48G (J9775A)		3
	CORE	HP	2810 48G (J9022A)	Aug 2013	1
	EDGE	HP	2650 48 (J4899A)	Jan 2005	5
	EDGE (WIRELESS)	HP	1920 SERIES 16 PORT (JG926A)	Aug 2017	1
	EDGE VOIP	CISCO	SF300 24	Oct 2018	1
	EDGE VOIP	CISCO	SF302 8	Oct 2018	1
	VOIP SVR	CISCO	800 SERIES	-	1
	NCC SWITCH	CISCO	CATALYST 2960S POE+	-	1
KINL HUB	EDGE VOIP	CISCO	SF300 24	Oct 2018	1
	EDGE	HP	2530 48G (J9775A)		2
	EDGE	HP	2610 48 (J9088A)	May 2012	1
	EDGE	HP	2510G 24 (J9279A)	Aug 2013	1
	EDGE (WIRELESS)		HPE OFFICE CONNECT 1920 (JG926A)	Aug 2017	1
SEN HUB	EDGE VOIP	CISCO	SF302 8	Oct 2018	1
	EDGE	HP	2824 24 (J4903A)	Dec 2009	1
PE HUB	EDGE	NETGEAR	8 PORT	-	2

8.3 Switching – Future works and upgrades		
Do the school have plans to upgrade or modify the switching?	☐ Yes	☒ No
The scope of works and timeline	Switching only replaced if faulty. No upgrades planned.	

8.4 Switching – Additional comments

No true core switch operating to provide the Schools with the central infrastructure foundation.

9: Active Infrastructure – Wi-Fi

9.1 Wi-Fi - Configuration	
Is the solution managed	☒ Managed ☐ Unmanaged
If managed, what type of management solution is used	☒ Onsite controller ☐ Cloud management ☐ AP GUI
How many access points is the solution licenced for	24no across the two schools.
Wi-Fi Standard	☐ a/b/g ☐ n ☒ ac w1 ☐ ac w2

9.2 Wi-Fi - products					
Location (block, room / cabinet)	Type (AP, Controller, Antenna)	Manufacturer	Model	Date warranty expires	Quantity
Server room	Controller	Fortinet	Fortinet WLC 500D	1y Rolling Contract	1no
Astley Building	AP	Meru	AP122	1y Rolling Contract	18no

9.3 Wi-Fi – Future works and upgrades		
Do the school have plans to upgrade or modify the Wi-Fi solution?	☐ Yes	☒ No
If Yes, please provide detail of the scope of works and timeline		

9.4 Wi-Fi – Additional comments
No support for the wireless network. Hardware warranty expired January 2018.

10: Servers

10.1 Servers - Configuration			
Is the solution stand-alone virtualized?	☐ Stand-alone	☒ Virtualized	
What back-up solution is in place?	☐ Disk to tape	☒ Disk to disk	☐ Cloud

10.2 Servers - Equipment							
Location (block, room / cabinet)	Function (DC, App, SAN)	Manufacturer	Model	Rack or pedestal	RAID 5	Date warranty expires	Quantity
SERVER RM	SAN	HP	MSA 2040	RACK	YES	Dec 2019	1
	FIREWALL	SMOOTHWALL	S8	RACK		Unknown	1
	VS HOST	HP	DL380 G9	RACK		Aug 2020	2
	UPS	APC	SMART 2200	RACK		Unknown	3
	UPS	APC	SMART 750	RACK		Unknown	1

10.3 Servers - Future works and upgrades		
Do the school have plans to upgrade or modify the servers?	☐ Yes	☒ No
If Yes, please provide detail the scope of works and timeline		

10.4 Servers – Additional comments

11: User Devices

11.1 User devices - equipment		
Quantities of user devices		
	Total for School	
Desktop devices e.g. PC	365no	**Appendix 1**
Mobile devices e.g. laptop, IPad	125no	**Appendix 1**

11.2 User devices - Future works and upgrades		
Do the school have plans to upgrade or purchase additional user devices?	☐ Yes	☒ No
If Yes, please provide detail of number, type and timeline		

11.3 User devices – Additional comments
For further details on the user equipment please see appendix.

12: Audio Visual Equipment

12.2 Classroom and meeting room AV - Equipment		
Quantities of classroom and meeting room AV equipment		
	Total in for school	
Projector – ceiling mounted	45no	Epson / HP / NEC Long-throw models
Projector – wall mounted	0	
Interactive white board	45no	SMART Interactive Boards
Interactive screen	0	
Speakers (Powered)	45no	Various
Speakers (Separate Amp)	45no	Various

12.3 Large Space AV

Quantities of large space AV:	
	Total for school
Projector	1no
Speakers (powered)	Yes
Speakers (separate amp)	Yes
Sound desk	No
Stage lights (Mobile)	Yes
Stage lights (Rigged)	Yes

12.4 Digital signage - Configuration			
Does the school have a digital signage solution?	☐ Yes	☒ No	
If yes, how are they connected?	☐ Data	☐ Other	
How is content managed?	☐ Dedicated appliance	☐ Shared server	☐ User device e.g. PC

12.5 Digital signage - Equipment	
	Total for school
Projector	N/A
Digital display	N/A

12.6 AV - Future works and upgrades		
Do the school have plans to modify existing or purchase new AV?	☒ Yes	☐ No
The scope of works and timeline	Summer 2020 – Digital signage, donation of TVs from local business. Ad-hoc install of chrome based software to run the screens.	

12.7 Audio Visual Equipment – Additional comments

13: Peripherals

13.1 Printing	
Quantities of printers:	
	Total for school
Desktop printers	
Networked printer	9no – Leased from, Total Business Group - PEAC
Multi-Functional Device	3no – Leased from, Total Business Group - PEAC

13.2 Peripherals – other	
Quantities of other peripherals:	
	Total for school
Franking Machine	1no – Main Reception. Networked.
Cash Machine	1no – Public Library, maintained by NCC.

13.3 Peripherals - Future works and upgrades		
Do the school have plans to modify existing or purchase new peripherals?	☐ Yes	☒ No
The scope of works and timeline		

13.4 Peripherals – Additional comments

14: Building systems

14.1 Building Systems - CCTV		
Quantities of CCTV equipment		
	Total for school	

CCTV Control/recording unit	1no	
Internal CCTV Camera - Digital	6no	
Internal CCTV Camera - Analogue	n/a	
External CCTV – Digital (terminated in block)	n/a	
External CCTV – Analogue (terminated in block)	n/a	

14.2 Building systems – Cashless catering		
Quantities of cashless catering equipment:		
	Total for school	Other Info
Cash loader point	2no	2017
Till unit	3no	2017
System Provider/Software	Impact	2017
Location Software (onsite/cloud)	Onsite - Server room	

14.3 Building systems – Library systems		
Quantities of library system equipment		
	Total for school	Other Info
System	Oliver	Cloud based
PC	1no Computer	

14.4 Building systems – access control		
Quantities of access control equipment		
	Total for school	Other Info
Control unit/PC		
Door entry unit/lock	Caretaker PC for ID cards	
Gates	External Gates, Staff ID card access.	

14.5 Building systems - Future works and upgrades		
Do the school have plans to modify existing or purchase new building systems?	☐ Yes	☒ No
The scope of works and timeline		

14.6 Building systems – Additional comments

15: Telephony

15.1 Telephony - Services		
The school's current telephony services		
Supplier(s)	Gamma	
Type	☒ Analogue ☐ Feature Net ☒ ISDN2 ☐ ISDN30 ☐ SIPS	
Number of lines and type	Voice	4no
	CCTV	
	Security	
	Building management	1no Red-care
	Lift	
	Fax	
	Franking machine	
	Other	
Number of DDI's		

Total number of extensions	54no
When is the contract due to expire?	2020

15.2 Telephony – Routing and termination	
Where do the connections enter the school site	Into the server room, down the main entrance to the site.
In which block do the connections enter the school buildings?	BLOCK A
In which block are the connections terminated?	BLOCK A
In which blocks do the connections pass through between entering the building and termination?	None

15.3 Telephony - Equipment	
Telephone system make and model	Cisco 800 Series – Cloud Hosted
Number of handsets	47no - Cisco SPA 504G Handsets
Date purchased	Unknown
Date warranty expires	Summer 2020
Support/maintenance agreement in place?	Support contract in place with Gamma. End's July 2020
If the telephone system is leased, provide details of lease provider and data lease is completed	Hardware owned.
The strategy for the distribution of handsets in your current school, providing details of where they are located currently	Office based handsets, no wireless handsets

15.4 - Future works and upgrades		
Do the school have plans to modify existing or purchase new telephony services or equipment?	☐ Yes	☒ No