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## **Primary School Wide Area Network Bandwidth Upgrade**

**Report by Director, Strategic Commissioning and Partnerships**

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### **Executive Committee**

**1 March 2022**

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#### **1 PURPOSE AND SUMMARY**

- 1.1 This report proposes digital enhancements to the Wide Area Network (WAN) bandwidth capability within the Primary Schools estate.**
- 1.2 A review of the Councils Primary Schools network capability has identified that a number are now experiencing peaks heading towards the limits of the technology that is currently provisioned.
- 1.3 BT will switch off the analogue network in 2025, this proposed solution addresses the sites that are not currently on a fibre service.
- 1.4 It is anticipated that the proposed enhancements will:
  - For every primary school, provide a minimum of a 100mbps connection over a 1000mbps circuit.
  - Provide equity of access to digital learning, irrespective of location within the authority.
  - Enable the primary schools to be 'Fit for 2024' and beyond. By providing 1000mbps connections, this will accommodate anticipated bandwidth increases, at a fixed cost, as and when demand increases.

#### **2 RECOMMENDATIONS**

- 2.1 I recommend that the Executive Committee agrees to implement the proposed Wide Area Network bandwidth increases within the primary school estate.**

### 3 BACKGROUND

- 3.1 The success of the Authority's Inspire Learning programme in embedding digital at the heart of the learning and teaching continues to increase the demand for fast, capable internet and network connectivity within primary schools. In the five years since the original contract with CGI was signed, bandwidth utilisation has grown to the point that a significant number of our primary schools are now seeing peaks heading towards the limits of the technology that was provisioned.
- 3.2 The planned National analogue switch off in 2025 will see demand for high bandwidth and low latency connectivity to support digital telephony and this proposed upgrade will allow the authority to meet that future demand.
- 3.3 A breakdown of the proposed wide area network bandwidth changes are outlined in Appendix 1

### 4 NETWORK REVIEW / STRATEGY

- 4.1 The Authority's Digital Strategy was approved by Council in February 2021 and will help the Authority to become the UK's first smart connected rural region, supporting better outcomes for everyone who lives and works in the borders. This proposal is in line with the capital investment strategy.
- 4.2 The proposed wide area network bandwidth upgrades will support the following live infrastructure proposals:

**Digital Workplace** – Increased access to corporate applications and services remotely.

**Curricular Server Consolidation** – Consolidating servers from primary schools into the data centres.

**Unified Communications** – The replacement of the local Private Automatic Branch Exchanges (PABX) with a centralised IP telephony solution.

**Primary School Wi-Fi** – Increase coverage within the primary school estate.

## 5 IMPLICATIONS

### 5.1 Financial

The increase in wide area network bandwidth has been negotiated to be revenue neutral compared with current capacity and service, representing significant added value for the authority.

This proposed wide area network bandwidth upgrade project will be funded by the additional ICT & Transformation services spend profile agreed in CAN CR349 (Extended Term).

#### One off Capital Charges

One off Implementation Charges				
Name/Role	Role Description	Effort(days)	Total	
Labour Charges	One off labour charges	154.5	£144,636.95	
Third Party Supplier				
Supplier	Details	Quantity (school sites)	Unit Price	Total
	WAN circuits to Primary schools listed	44		£216,675.00
Third Party Supplier Total				£216,675.00
				Total
One off Labour Charges Total				£144,636.95
Third Party Supplier Total				£216,675.00
Total Price excluding VAT				£361,311.95

For any future increase in bandwidth at each of the primary schools, there will be a catalogue pricing structure used as below:

Bearer	Description	Annual Charge increase
1Gbps	Additional Sites - 100Mbps – 200Mbps	£168.75
1Gbps	Additional Sites - 100Mbps – 500Mbps	£472.50
1Gbps	Additional Sites - 100Mbps – 1Gbps	£1,080.00

## 5.2 Risk and Mitigations

It is inevitable given the growth of the internet and demand for connectivity for schools that infrastructure will require to be upgraded in the future so by doing nothing at this time would leave a number of the current primary school estate running close to, or at the physical limitations of the existing network provision. This would then require to be dealt with via separate change requests, a tactical approach that would be more expensive to deliver on a site by site basis.

## 5.3 Integrated Impact Assessment

As this is an infrastructure upgrade project, and by design is enhancing current provisions, an Integrated Impact Assessment is not required.

## 5.4 Sustainable Development Goals

The core proposal delivering enhanced connectivity to 44 authority buildings does not directly impact on the authority's sustainability and carbon management commitments.

## 5.5 Climate Change

N/A

## 5.6 Rural Proofing

N/A

## 5.7 Data Protection Impact Statement

- There are no personal data implications arising from the proposals contained in this report.

## 5.8 Changes to Scheme of Administration or Scheme of Delegation

N/A

# 6 CONSULTATION

- 6.1 The Director (Finance & Corporate Governance), the Monitoring Officer/Chief Legal Officer, the Chief Officer Audit and Risk, the Director (People Performance & Change), the Clerk to the Council and Corporate Communications have been consulted and any comments received have been incorporated into the final report.

## Approved by

**Name - Jen Holland**

**Title – Service Director Strategic Commissioning and Partnerships**

## Author(s)

Name	Designation and Contact Number
Nick Byers	IT Client Manager

**Background Papers:** n/a

**Previous Minute Reference:** n/a

**Note** – You can get this document on tape, in Braille, large print and various computer formats by contacting the address below. Nick Byers can also give information on other language translations as well as providing additional copies.

Contact us at Nick Byers, IT Client Manager – [nbyers@scotborders.gov.uk](mailto:nbyers@scotborders.gov.uk)

## Appendix 1 – Proposed Primary School Wide Area Network Bandwidth Changes

School	Current Connection	Proposed Connection	School	Current Connection	Proposed Connection
Ancrum Primary School	10/100	100/1000	Lilliesleaf Primary School	50/100	100/1000
Ayton Primary School	50/100	100/1000	Melrose Primary School	100/100	1000/1000
Broughton Primary School	100/100	100/1000	Morebattle Primary School	10/100	100/1000
Burnfoot Primary School	100/100	1000/1000	Newcastleton Primary School	100/100	100/1000
Channelkirk Primary School	10/100	100/1000	Newlands Primary School	100/100	100/1000
Chirnside Primary School	100/100	1000/1000	Reston Primary School	10/100	100/1000
Clovenfords Primary School	10/100	100/1000	Sprouston Primary School	10/100	100/1000
Cockburnspath Primary School	10/100	100/1000	St. Peters Primary School	100/100	100/1000
Denholm Primary School	10/100	100/1000	St. Ronans Primary School	100/100	1000/1000
Eddleston Primary School	10/100	100/1000	Swinton Primary School	10/100	100/1000
Ednam Primary School	100/100	100/1000	Trinity Primary School	100/100	1000/1000
Fountainhall Primary School	10/100	100/1000	Tweedbank Primary School	30/100	100/1000
Gordon Primary School	10/100	100/1000	Walkerburn Primary School	10/100	100/1000
Greenlaw Primary School	10/100	100/1000	West Linton Primary School	100/100	1000/1000
Heriot Primary School	10/100	100/1000	Westruther Primary School	10/100	100/1000
Kingsland Primary School	100/100	1000/1000	Wilton Primary School	100/100	100/1000
Kirkhope Primary School	20/100	100/1000	Yarrow Primary School	10/100	100/1000
Langlee Primary School	100/100	1000/1000	Yetholm Primary School	10/100	100/1000
Lauder Primary School	100/100	1000/1000	Priorsford Primary School	100/1000	1000/1000
Balmoral Primary School	EFM	100/1000	St. Boswells Primary School	EFM	100/1000
Coldstream Primary School	EFM	100/1000	Stirches Primary School	EFM	100/1000
Philiphough Primary School	EoFTTC	100/1000	Stow Primary School	EoFTTC	100/1000