# Education, Children and Families Committee

## 10.00am, Tuesday, 6 March 2018

# Schools Wi-Fi

| | |
|---|---|
| **Item number** | 7.3 |
| **Report number** | |
| **Executive/routine** | |
| **Wards** | All |
| **Council Commitments** | |

## Executive summary

Since the upgrade of the Wi-Fi technologies there have been a number of service related issues and poor coverage. This has had a direct impact on the Schools ability to connect multiple different devices to the network and therefore can impact on the student's education.

There have been two contributing factors resulting in poor Wi-Fi coverage to the schools. One was that there was a configuration issue with the core Wi-Fi controllers and this resulted in intermittent service loss and the other was poor coverage within the schools.

The configuration issue within the core was resolved in December 2017 and there has been no re-occurrence of the intermittent service loss.

A service improvement plan was implemented to deal with the poor coverage issues. This involved surveying 79 sites and if appropriate the Wi-Fi access point was repositioned or in some cases additional Wi-Fi access points were installed.

# Report

## Schools Wi-Fi

### 1.    Recommendation

1.1    Members of the Education, Children and Families Committee are recommended to note and scrutinise this report.

### 2.    Background

2.1    Following the replacement of the legacy Cisco Wireless Access Points with Aruba Access Points a number of school sites have reported issues with signal coverage.

2.2    There have been two contributing factors resulting in poor Wi-Fi coverage to the schools:

- a configuration issue in the core of the network which resulted in intermittent service loss; and

- poor Wi-Fi coverage within a number of Schools.

2.3    A service improvement plan was introduced to deal with these issues and it resulted in a physical survey of 79 sites and a desktop survey of the remainder sites. This resulted in a number of remediation activities and the results are documented within this report.

### 3.    Main report

3.1    In December 2017 a configuration issue was identified in the core Wi-Fi Infrastructure. This configuration issue meant that the network was intermittent and that on occasions all schools lost Wi-Fi access. This issue was resolved in December and there has been no re-occurrence of these issues.

3.2    A service improvement plan was implemented to deal with the poor coverage issues. This involved surveying 79 sites and if appropriate the Wi-Fi access point was repositioned or in some cases additional Wi-Fi access points were installed. The table below identifies the current position with those 79 sites:

| Site Type | Number of sites with issues resolved | Number of sites with issues outstanding |
|---|---|---|
| Primary School | 31 | 23 |
| High School | 17 | 2 |
| Special Needs School | 3 | 3 |

3.3     All remaining sites have had a desktop review carried out and no additional action is required at this stage.

3.4     Appendix A identifies the full list of Schools and their status.

## 4.     Measures of success

4.1     Improved Wi-Fi coverage that allows multiple different devices to be connected to the network to allow the students to access education material through the internet.

4.2     A reliable and fault free environment.

## 5.     Financial impact

5.1     While there is no specific direct financial impact resulting from the report's contents, enhancements to the effectiveness of the Council's Wi-Fi systems form an essential part of improved educational teaching methods.

## 6.     Risk, policy, compliance and governance impact

6.1     Improvements to the Wi-Fi allows the Schools to have full access to all digital educational material.

## 7.     Equalities impact

7.1     The failure to provide a Wi-Fi network that allows all schools devices to the network had a direct impact on the education of the students.

## 8.     Sustainability impact

8.1     There is no direct sustainability, climate change adaptation or sustainable development impact arising from the report's contents.

## 9.     Consultation and engagement

9.1     Whilst there are no direct consultation and engagement implications arising from this report.

## 10.    Background reading/external references

10.1    None

## 11. Appendices

Appendix 1 – Schools Status report

**Stephen S. Moir**

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**Appendix 1 – Status Report**

## Sites that have had fixes applied: (51 Sites)

| | |
|---|---|
| Dalry Primary | Bun-sgoil taobh na pàirce |
| Drummond Community High | Sciennes Primary |
| Holy Rood RC High | Davidson's Mains Primary |
| Broughton High | Flora Stevenson Primary |
| Currie Community High | Leith Academy |
| St John Vianney RC Primary | Longstone Primary |
| St Augustines RC High | Castlebrae Community High |
| Balerno Community High | Gorgie Mills |
| Corstorphine Primary | Kaimes |
| St Thomas of Aquins RC High | Woodlands |
| Trinity Academy | Blackhall Primary |
| Liberton Primary | Fox Covert ND |
| Gilmerton Primary | Ratho Primary |
| Gracemount Primary | Roseburn Primary |
| Gylemuir Primary | Canal View Primary |
| Wester Hailes Education Centre | Buckstone Primary |
| Craigmount High | Firrhill High |
| Craigroyston Community High | Towerbank Primary |
| Colinton Primary | St John's RC Primary |
| Gracemount High | Newcraighall Primary |
| St Mary's RC Primary (Edin.) | ABBEYHILL PRIMARY SCHOOL |
| Victoria Primary | The Royal High Primary |
| Trinity Primary | Holy Cross RC Primary |
| Craiglockhart Primary | James Gillespies High |
| Leith Primary | Blackhall Primary |
| Stenhouse Primary | |

## Sites that require additional work (28 sites)

| | |
|---|---|
| Royal High School | Tynecastle High |
| Queensferry Primary | St Mary's RC Primary (Leith) |
| East Craigs Primary | Niddrie Mill Primary (St Francis) |
| Dalmeny Primary | St Peters RC Primary |
| Broomhouse Primary | James Gillespie's Primary |
| Redhall | Brunstane Primary |
| Bonaly Primary | Cramond Primary |
| Juniper Green Primary | Broughton Primary |
| Pentland Primary | Craigroyston Primary |
| Currie Primary | Pilrig Park |
| Oxgangs Primary | Clermiston Primary |
| South Morningside Primary | Forthview Primary |
| Braidburn Special School | St David's RC Primary |
| DeanBank | Parsons Green Primary |

The following L&T sites were reviewed and it was determined that there were no coverage issues: (42 Sites)

| | |
|---|---|
| St Josephs RC Primary | Queensferry Community High |
| St Andrews Fox Covert RC Primary | Hermitage Park Primary |
| Dean Park Primary | Craigour Park Primary |
| Stockbridge Primary | Duddingston Primary |
| St Margaret's RC Primary | ST MARKS (RC) PRIMARY SCHOOL |
| Preston Street Primary | Clovenstone Primary |
| St Katharine's | Sighthill Primary |
| Nether Currie Primary | Murrayburn Primary |
| Tollcross Primary | Howdenhall |
| Wardie Primary | Craigentinny Primary |
| Kirkliston Primary | Lorne Primary |
| Prestonfield Primary | Leith Walk Primary |
| St Catherine's RC Primary | Bruntsfield Primary |
| Hillwood Primary | Castleview Primary |
| Ferryhill Primary | Balgreen Primary |
| Oaklands School | Royal Mile Primary |
| Echline Primary | St Cuthberts RC Primary |
| Forrester High | Pirniehall Primary |
| St Ninian's RC Primary | Prospect Bank |
| Carrick Knowe Primary | Rowanfield |
| Liberton High | St Crispin's |