

REPORT

SUBJECT: ICT in schools Project Update

MEETING: Economy and Development Select

DATE: 13th July 2017

DIVISION/WARDS AFFECTED: AII

1. PURPOSE:

1.1 The purpose of this report is to provide Members with a progress update on the investment programme for ICT in schools. This programme involved the upgrade and renewal of the ICT infrastructure in schools, providing a common platform and standard in line WG and 21st century schools aspirations.

3. THE BACKGROUND TO THE INVESTMENT PROPOSALS:

- 3.1 The 21st Century Schools programme set out a vision that the technical ICT infrastructure was able to support the curriculum and meaningful teaching and learning in Monmouthshire schools, to prepare students for further education and to live and work in a digital world. In order to achieve this vision it was critical that schools had a sustainable, resilient and robust ICT platform that meets the needs of the 21st teaching and learning environment.
- 3.2 In July 2015 Cabinet agreed a business case that proposed a single model and specification for ICT provision that will enable a consistent and standard of technology and support, with all the benefits that this brings to teaching and learning. The chosen option was for the Council to fund an investment programme of £885k to
 - Put in place a baseline of 100mg standard of connectivity for primary schools in line with WG aspirations.
 - Migrate the school based server and network infrastructure to the state of the art and secure SRS data centre in Blaenavon
 - Refresh equipment and Wi-Fi in schools to bring it up to a consistent baseline standard
 - Install Schools Information Management System (SIMS) in the classrooms
- 3.3 The business case outlined the need for a more coherent, structured and strategic approach to ICT provision in Monmouthshire schools. It was apparent

that schools in the primary sector had spread in different directions in terms of kit, support, knowledge, aspiration, expertise and understanding. This led to different approaches to digital teaching and learning between schools.

- 3.4 There had been varying investment in ICT improvements in schools in over several years, with some schools using their delegated budgets to benefit from an improved infrastructure, together with enhanced connectivity and peripherals. However, primary schools in particular were suffering from a lack of investment in ICT. This was impacting on how technology can be used to effectively delivery teaching and learning in schools, and ultimately on the level of digital expertise and knowledge when children move up into secondary education and careers.
- 3.5 The level of ICT connectivity in schools and the need to use ICT to raise standards in education has been raised in a number of the councils plans and strategies including the Improvement Plan, The CYP Chief Officer report, the iCounty strategy, the Authority's strategic risk register and it is also an integral part of the delivery of 21st century schools capital programme. The issues were also outlined at the Digital Programme Board who requested that a Business Case be developed showing the options and costs to remedy the situation.
- 3.6 The specific issues within the business case and the proposed resolutions:
 - (a) Schools were at risk of losing data and information should school-based servers fail or be infected by a virus. Migrating to the SRS offers a robust and resilient school ICT network, removing the risk of data or information being lost should school based infrastructure fail.
 - (b) The SIMS system (School Information Management System), the curriculum network and the administrative network were located on ageing servers. Migration to newer and more powerful servers will improve reliability, performance and accessibility.
 - (c) The level of connectivity in many schools did not adequately support the effective delivery of teaching and learning in the school environment. Whilst a handful of schools had 100 mb PSBA (Public Sector Broadband) lines, the majority of primary schools were connected via 10 MB PSBA lines, with a small number receiving even poorer connectivity. Upgrading these to 100 mb PSBA lines will significantly improve speed and resilience of the internet and network access to schools.
 - (d) The Wi-Fi connectivity, coverage and performance was variable and often poor. Upgrading the wireless infrastructure to achieve optimum Wi-Fi saturation throughout the school estate will give secure on-line access to more teachers and children.
 - (e) Teachers were suffering from not having SIMS in the classroom. The aspiration is to have remote access to SIMS via MCC security enabled equipment. This will improve efficiency and effectiveness tenfold and is an essential requirement in 21st century education.

- (f) ICT devices in schools were not standardised and were of variable age and quality. Some were so old that they were no longer supported and a significant number of PC's were are running on the out-dated Windows XP operating system. A refresh of core ICT hardware in schools will bring it up to a consistent standard will provide a baseline across the schools estate.
- 3.9 The single SLA model and the specification proposed for ICT infrastructure will enable a consistent and adequate standard of technology and support, with all the efficiencies that this brings.
- 3.10 The investment was predicated on <u>all</u> Monmouthshire schools signing up to a 3 year SLA with the SRS, ensuring that the ICT support model was adequately funded to provide the necessary high levels of technician support. After extensive consultation all but 3 schools agreed to the SLA, and Cabinet were reassured that this level of sign-up was sufficient to ensure the viability of the support model and that performance standards could be maintained.
- 3.11 Implementation was programmed in two phases. The first phase was to upgrade the existing ICT infrastructure (Wi-Fi, networks, equipment, servers and internet connections) ensuring all schools had an equal baseline ICT provision. The second phase consisted of the migration of schools up to the SRS data center. The target completion date for the programme was for November 2017.
- 3.12 A total investment of £885,775 was agreed to allow the upgrade and installation of infrastructure, equipment and connectivity in schools and at the SRS. This was funded from a mix of reserves and prudential borrowing.

4 PROGRAMME UPDATE

- 4.1 The investment programme is predicted to finish on time, within budget and to the required standard and specification. It is expected that all work will be fully complete over the summer period, with a post project review in September 2017 to address any residual issues. Schools are already reporting an overall increase in performance of the infrastructure upgrade and the level of technician support within the SLA.
- 4.2 Overall the programme implementation has been very smooth, though the planned priority order has been adjusted due to
 - Several schools requiring emergency migration to the SRS following unexpected server failures or virus attacks. This has reinforced the benefit of using the SRS with their very secure data centre arrangements.
 - Delays whilst OpenReach undertake installations in some schools due to their remote locations and distance from the main telephone exchanges necessitating extensive cabling.
 - Some installations have required permission from the highways authorities for roadworks and traffic control to be installed.
 - Some work could not be undertaken as planned due to access restrictions to school premises during school events or over holiday periods.

4.3 The following specific work schedule will see completion of the project prior to a post project review:

<u>PSBA</u> - All schools have now had the PSBA 100mb lines installed. Two schools, Mounton House and Shirenewton, have complex switchover issues and a decision was made to migrate them to the SRS at the same time as switching from the 10mb to the 100mb lines. Both sites will be completed in July.

<u>SIMS</u> – SIMS in the classroom is dependent upon installation and connection of the 100mb lines, as network performance would be compromised with the lower 10mb broadband speeds. The schools still awaiting either connection or training in SIMS functionality are:

- Our Lady's RC Primary The SIMS trainer is waiting for the school to make contact to complete the training
- Llanvihangel Crucorney Waiting to schedule SIMS training now that the 100mb line has been installed
- Llantilio Pertholey Primary
- Cantref Primary
- Goytre Fawr Primary

<u>WIFI</u> - There are 2 slightly more complex sites awaiting completion of WIFI installation

- Ysgol y Fenni waiting for a new date for completion of WIFI
- Overmonnow Primary WI-FI installation is complete, but the school has requested installation of Wi-Fi in the nursery building. This is outside of the scope for upgrade programme so the school are funding it separately and the SRS are arranging the work to be undertaken with the contractor.

<u>SRS migration</u> – There are 2 remaining schools to be migrated to the SRS, with *provisional* dates as follows:

- Shirenewton Primary migration 10th July
- Mounton House migration 24th July

<u>General</u> - There is a small amount of remedial work to be done at schools previously migrated to the SRS and this will take place over the summer break:

- Thornwell
- Deri View
- The Dell
- Dewstow
- Raglan

5 POST COMPLETION REVIEW

5.1 The final stage of the project is a post-completion review and evaluation with all schools. It is intended to set up a quarterly liaison meeting with the SRS, the LA and representatives from each school cluster where ongoing performance will be undertaken.

6 BACKGROUND PAPERS:

Cabinet reports 15th July 2015 & 6th January 2016

Council report 30th July 2015 Economy and Development Select 11th July 2016 The Business case for ICT in schools

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