SUBJECT: UPDATE ON THE ICT IN SCHOOLS INVESTMENT PROGRAMME

MEETING: ECONOMY AND DEVELOPMENT SELECT
DATE: 11TH JULY 2016
DIVISION/WARDS AFFECTED: NONE

1.   PURPOSE:

1.1 The purpose of this report is to update members on the progress of the ICT in schools investment programme.

2.   RECOMMENDATIONS:

2.1 That members scrutinise the report and request further clarification as required.

3.   KEY ISSUES:

3.1   The ICT in schools business case was agreed in July 2015. The business case detailed the proposal, which consisted of –

- A comprehensive Service Level Agreement with the SRS starting in April 2016 and
- A separate programme for the upgrade of the schools ICT infrastructure which was due to start in July 2015, but was delayed until January 2016 whilst further cabinet and council approval was sought to proceed with the investment as not all schools had signed up to the SLA.

3.2   Appendix '1' shows a recap of the benefits of the investment programme for schools

4.   REASONS:

4.1   The investment programme has a priority plan and has been sequenced to cover schools with the poorest quality of ICT infrastructure first but at the same time enable schools further down the list to see some benefits early on. Appendix 2 details progress so far with individual schools, but the individual elements of the programme and dependencies are detailed below -

4.2   Upgrading the PSBA lines to 100mg -

The investment programme will provide all schools with a 100mb data line which can also be used for voice data. All schools have required an inspection to identify if their current network cabinets are capable of receiving the 100mg service. The audit has been undertaken by a specialist contractor in conjunction with the SRS, and there is a requirement for many of the data cabinets being upgraded or relocated into a more suitable part of the school.

4.2.1 The BT PSBA order:

4.2.1.2   The programme was authorised at the same time that WG awarded the PSBA contract to a new supplier, BT and some delays were experienced before BT were in a position to accept an order for the lines to be upgraded. The lead time for implementation is 90 working days, and before the upgrade can commence there is a prior dependency on the network cabinets being upgraded. Many schools required excess work to be undertaken – digging up the roads to install cables etc. – and charges for this excess work have to be agreed prior to the work being done. An added complication is that BT PSBA and BT Opensource are two separate companies and work independently from each other and some delays have been experienced whilst the order was placed between PSBA and Opensource.

4.2.1.3   It's important to note that until schools get both their PSBA line and Wi-Fi upgrades there could be a decrease in the performance of the network, with some sessions 'dropping out'. This is especially apparent where schools have been increasing their network connections due to receiving upgraded equipment or using web based applications like SIMS in the classroom. It's a bit like reaching a bottleneck at the tunnels on the M4 where traffic has increased but the road is too narrow.

4.3   Upgrade of the Wi-Fi:

4.3.1   The existing Wi-Fi capabilities of the school buildings are being upgraded to ensure good Wi-Fi connectivity. This work is being undertaken by a specialist contractor following an audit of the Wi-Fi capability by the SRS. It hasn't been possible to complete Wi-Fi upgrades so far, as it is critical to ensure that any issues identified during the PSBA audits are incorporated into the Wi-Fi installation. The specialist contractor is meeting the SRS on 5th July to schedule the bulk of the Wi-Fi work over the summer recess in order to avoid disruption at the schools. It is possible that cabinet upgrades and W-i-Fi upgrades can be undertaken in tandem.

4.4   Upgrade of equipment:

4.4.1   Many schools have been working from very old laptops which are not able to run SIMS in the classroom. This meant that teaching staff were unable to reap the benefits of using SIMS outside of the fixed admin computers. The SRS have prioritised the replacement of teaching equipment to enable SIMS in the classroom to be rolled out as soon as possible. The upgrade of the student equipment will follow on from the teaching equipment upgrade.

4.4.2   It's important to note that after this initial equipment upgrade the school will be responsible for funding its own replacement programme.

4.5   Migration of schools servers to the SRS building:

4.5.1   Phase 2 of the investment programme will be the migration of schools data and information storage from servers based on site at the school and into the SRS state of the art data hall environment. This will enhance the security of data and negate the need for schools to reserve funds to replace the existing physical servers on site at schools. Several schools have already migrated to the SRS, some as an emergency measure when their existing servers failed.

4.5.2   Schools with the oldest servers have been prioritised, but there is a requirement for schools to do some work to sort out their existing data, enabling 'clean' data to be transferred up

to the SRS. It's an opportunity for schools to enhance their existing file structures and systems. If schools are unable to complete this work before they reach their place in the queue they will be replaced by the next school in the queue.

4.6   Communications:

4.6.1   Communication within the programme is critical. Early lessons were learnt when communications failed and misunderstandings arose between the schools and the SRS. To address this, the SRS now attend every schools cluster meeting, every MAPS meeting and also the MASG meetings. A newsletter is issued periodically to update schools.

4.6.2   The SRS has assigned technicians to schools within their cluster groups, and the SRS and the Digital and Technical Manager have attended meetings with head teachers and schools governors where necessary. All schools are able to log service calls electronically and have received details of how to escalate any issues or problems.

4.7 Programme performance:

4.7.1   The first phase of the investment programme is on schedule for completion by December 2016, with migration to the SRS being undertaken by the autumn of 2017. Completion of migration is very much dependant on schools undertaking the preparation work beforehand.

4.7.2   This is some 6 months behind the original schedule due to the late start of the overall programme. Individual schools will continue to be informed when they will receive each part of the investment as the programme advances. Monthly newsletters include a spreadsheet containing anticipated dates of completion.

5.   RESOURCE IMPLICATIONS:

There are no resource implications as a result of this report as the programme is currently within budget.

6.   CONSULTEES: SRS

7.   BACKGROUND PAPERS: The ICT in schools business case
8.   AUTHOR: Sian Hayward – Digital and Technology Manager

9.   CONTACT DETAILS:

Tel: 07971893998
E-mail: sianhayward@monmouthshire.gov.uk

Appendix 1:
The benefits of the investment package and the ongoing SLA

The initial investment programme includes–

- Installation of 100mg PSBA lines
- SIMS in the classroom
- An upgrade of schools ICT equipment (or voucher up to £5k in value)
- Upgrade of Wi-Fi connectivity
- 4 Technicians to support the upgrade, installation and migration programme over the next two years
- Networked e-mail provision giving a single network logon

The SLA includes -

- OVS licences to enable teachers to have email addresses and access to Office software
- 100mg PSBA line rental
- 2 full time SIMS helpdesk support / trainers
- Admin and schools on a single network across Monmouthshire, meaning that you need only login to a single integrated network
- Enough technicians to support you in the classroom and at the engine house
- Repair of classroom equipment (where it's economically viable – the SRS can't keep returning to bring a laptop back form the dead).
- Complete hosting, meaning you don't have to fund server replacements in the future as it's all included in the price.

The following technical items are also provided as part of the SLA - (Some essential items from the list below e.g. internet feed, security and SIMS are separately charged to schools not participating in the SLA agreement).

- Support contracts for software configurations & implementation
- Remote access to enable SIMS, files and folders to be accessed outside of the school
- An integrated firewall enhancing security
- A very secure system to ensure safe remote access files and folders
- Print management solution
- SIMS training & Helpdesk support(including ongoing training)
- Proxy server (web filtering)
- The internet feed
- Wireless controllers
- System monitoring – to check performance and issues on an ongoing basis
- An un-interruptable power supply with generator backup
- A secure room with air conditioning for all the servers
- At least 3 powerful servers to run VMWare
- Windows Server licenses
- Domain Controllers, Exchange Server, File Server, Print Server, Application Server

- A database Server e.g. for SIMS (A quote from a large external provider for hosting of SIMS is £1,500 for 30 users plus £30 per additional user per annum – you get this as part of the SLA)
- MAC server and license
- Licenses for Microsoft Exchange for e-mails
- SIMS support and training
- OVS licence fees
- Backend file storage e.g. SAN including network connectivity (SFP)
- Backup solution including tape drive, tape media, backup software and backup server
- Anti-virus software
- Desktop builds, software packaging and deployment solution (SCCM)
- Hardware repair i.e. laptops and servers
- Support contract for hardware
- Staff resources with expertise to manage all technical issues including: Windows Server Operating System , Active Directory (E-mail identifier), Group Policy (System to remotely manage systems and networks) , Network routing, switches and wireless, DHCP, DNS, FTP, Desktop including Windows Operating System and Apple OSx, iPad, SAN storage knowledge, Database knowledge e.g. SQL

Appendix 2
Schedule of the investment work programme

PSBA 100mg line installation

Step 1 – Initial line surveys have been scheduled by BT Openreach at the following schools:

- OLSM (27.6.16)
- Cross Ash (27.6.16)
- ARW (23.6.16)
- Durand (23.6.16)
- St. Mary's RC (30.6.16)
- The Dell (1.7.16)
- Gilwern (30.6.16)
- Overmonnow (1.7.16)
- Undy (24.6.16)
- Usk (5.7.16)
- Mounton House (1.7.16)

Step 2 - Fibre installation within the school is scheduled for:

- Rogiet (waiting on power installation in server room to be able to proceed)
- Trellech (waiting on a date to complete this work from BT Openreach)
- Llandogo (Waiting on a date)
- Dewstow (Blockages found and are being addressed by Openreach)

Step 3 - Agreement of excess construction charges

- Kymin View (Waiting on BT to proceed)
- Osbaston (Waiting on permission from MCC Property Services for BT to work)
- Ysgol Y Ffin (Waiting on permission to work from Property Services)
- Magor (Waiting on permission to work from Property Services)

Step 4 - Fit and test of 100mg line completed in the school

- Llanfoist
- Ysgol Gymraeg Y Fenni

Step 5 – Scheduled internal connection to 100mb line with the SRS on-site meeting with BT

- Deri View
- Castle Park

On hold temporarily:

- Pembroke (instruction from caretaker to do the work in the summer holidays)
- Llanfihangel Crucorney

- Shirenewton

Schools which are now fully operational on 100mb are:

- Thornwell
- Raglan
- Shirenewton (private fibre not PSBA)
- Castle Park
- Deri View

Laptop delivery -

All teacher laptop upgrades are complete.

No teacher equipment is required for:

- Dewstow
- Raglan

SIMS in the Classroom complete for:

- Shirenewton – in use
- Raglan – in use
- The Dell – undertaking own training
- Deri View – in use
- Dewstow – in use
- Thornwell – in use
- Llanfoist – in use
- Usk – training took place 18.5.16
- Trellech – training taking place 25.5.16
- Kymin View – training 29.6.16
- Osbaston – training 15.6.16
- ARW – training taking place 6.7.16
- Ysgol y Ffin – plan to use after Spring Bank Holiday
- Osbaston – training taking place 2.9.16

SIMS in the Classroom meetings have taken place for:

- Castle Park – The SIMS trainer will arrange training.
- Gilwern – working on assessment templates rather than attendance in the classroom.

Meetings to be scheduled for:

- OLSM
- Magor – still waiting on a response from the school

Wi-Fi:

NWL have undertaken all of the Wi-Fi audits. Meeting due on 5th July to schedule in the work over the summer to avoid disruption at the schools and also to ensure that any issues identified during the PSBA audits are incorporated into the Wi-Fi installation.

Service Point:

All schools have now been contacted and/or given login details for Service Point, which is the SRS electronic call logging system. Feedback so far has been positive. The SRS will be ceasing the use of paper fault sheets from 1st September 2016

.