Monday 3rd September 2007

at 8.30 am

in the Red Room, Avondale Centre,
Dyke House, Hartlepool
(Raby Road entrance)

Councillor Cath Hill, Cabinet Member responsible for Children’s Services and Councillor Pamela Hargreaves, Cabinet Member responsible for Performance will consider the following item.

1. **KEY DECISIONS**
   1.1 Computers for Schools Project 2007-09 – Director of Children’s Services and Assistant Chief Executive

2. **OTHER ITEMS REQUIRING DECISION**
   No items

3. **REPORTS FROM OVERVIEW OF SCRUTINY FORUMS**
   No items
SUMMARY

1. PURPOSE OF REPORT

To approve the implementation of the national Computers for Schools initiative which provides disadvantaged children and their families with computer facilities including broadband connectivity.

2. SUMMARY OF CONTENTS

This report explains the Computers for Schools initiative, funded through the Standard Fund Grants, which aims to put ICT into the homes of the most disadvantaged pupils, and goes on to explain how this initiative fits with a number of other strategies and plans that the local authority is pursuing.

It also explains how the project will be managed by the local authority, on behalf of schools and the benefits that can be expected from the project.

An explanation of the technical solution proposed is included, together with the risks associated and how these risks are being managed.

The costs of the project are highlighted and an explanation of where the funding will be made available from are also clarified.

3. RELEVANCE TO PORTFOLIO MEMBERS

The Portfolio holders have responsibility for Children's Services and Performance Management (including Information Technology).
4. **TYPE OF DECISION**

This is a key decision (Tests 1 and 2 apply).

5. **DECISION MAKING ROUTE**

The decision will be made jointly by the Portfolio holders of Children's Services and Performance Management.

6. **DECISION(S) REQUIRED**

To approve the implementation of the national Computers for Schools initiative which provides disadvantaged children and their families with computer facilities including broadband connectivity.
1. PURPOSE OF REPORT

To approve the implementation of the national Computers for Schools initiative which provides disadvantaged children and their families with computer facilities including broadband connectivity.

2. BACKGROUND

2.1 In March 2005 the Chancellor announced £50 million (£25 million per annum in 2006-07 and 2007-08) to put Information & Communications Technology (ICT) into the homes of the most disadvantaged pupils. A further £10 million (£5 million per annum in 2006-07 and 2007-08) of revenue funding was announced in the March 2006 Budget specifically to ensure that pupils targeted by this initiative have safe Internet access.

2.2 This funding is targeted at Key Stage 3 and 4 pupils resident in the 10% most deprived areas in England. The funding has been made available to the Local Authority (LA) and schools as part of Standards Fund Grants 125 (Connectivity) and 210 (Capital/Equipment) from April 2007. For Hartlepool this means for 2007-2008 funding of £341,600 for equipment and £71,900 for connectivity.

2.3 This initiative places the emphasis on personal access to ICT at home. Research shows that pupils' use of ICT, including in the home:

- raises standards
- supports personalisation
- improves their ICT skills
- provides more options for what they learn and how they learn it
- supports homework and revision
- increases motivation

2.4 By putting ICT into the homes of the most disadvantaged secondary aged pupils in the most deprived areas the project aims to:

- give these pupils the same opportunities as their peers;
- provide the conditions which can contribute towards raising educational achievement, narrowing the attainment gap and supporting progress towards their targets;
• support personalised learning by providing access to ICT whenever or wherever is most appropriate for learning;
• encourage the development of ICT skills appropriate to the 21st Century for the pupils and their families.

2.5 When deciding on the priorities and final allocation of the Computers for Pupils funding, schools and the local authority must take into account their duty to promote equality and also ensure they do not, either deliberately or unwittingly, discriminate against any particular group on the grounds of race, gender or disability.

2.6 Schools and local authorities participating in this initiative were invited to a national launch which took place in autumn 2006. Most Local Authorities have made significant progress in terms of procurement of equipment and those in Phase 1 funding have completed their purchases. Hartlepool schools are in Phase 2 of funding and have agreed the type of equipment to buy for use in the home. However all Local Authorities have found the connectivity requirement of the project to be an issue and a suitable means of safe connection led to many discussions and different ways forward. Alongside the connectivity issue have been concerns over the sustainability of the project. Those Local Authorities that have sought landline connections are aware of the problems associated with ongoing costs, e.g. line rental for broadband and have yet to make decisions on how to make this project continue past the initial year of funding.

2.7 In Hartlepool the LA and schools have worked in partnership to consider the most appropriate and effective type and level of connectivity for their pupils, particularly since not all households have landlines. The approach to connectivity for the home needs to be compatible with the overall strategy of the LA for delivering connectivity both to its schools and to the wider community across the authority. In particular, connectivity should be delivered in a way that achieves best value for money, whether from existing authority contracts or through new agreements (see section 6).

3. LINKS TO OTHER STRATEGIES/PLANS

3.1 Although the driving force behind this proposal is the Computers for Schools initiative, it also fits with a number of other strategies and plans including the Children and Young People’s Plan and Bridging the Digital Divide. The Digital Divide is the term given to explain how some groups of people, often those already socially disadvantaged in some way, are unable to take advantage of the benefits provided by Information Technology because they do not have access to the new technologies.

3.2 The Council ICT strategy, approved by Cabinet on 6th July 2005, highlights mobile and flexible working, and improved access as important to its success. This project will assist towards that goal by
introducing a technology that will enable increased access to ICT from more locations.

3.3 The Members' ICT project includes wireless, enabling the Civic Suite to allow more flexible access to information.

3.4 The Way Forward initiative supports the use of ICT to change working practices and how the council interacts with its customers. The Computers for Schools initiative will be the foundation for later expansion which will allow greater access to information through a variety of means in an increased number of locations.

3.5 Building Schools for the Future has as one of its aims, to enable all children and young people to achieve their full potential by shaping their learning to meet their individual needs. Personalisation of learning will shape teaching and learning in the future. Children increasingly learn in mobile ways with mobile technologies. BSF alongside the Computers for Schools scheme as a prelude to it, will allow for greater opportunities to capture pupils' enthusiasm for learning through mobile technologies.

3.6 The expectation that access to ICT is available anywhere is fast becoming the norm and allowing for flexible access to systems across the town will have a beneficial effect when hosting events such as the Tall Ships Race by enabling a communicative technology to be in place.

3.7 Links are also evident with the Hartlepool wide ICT strategy which has been developed by the Hartlepool Partnership ICT Strategy Group. The key aims of this strategy are:

- To drive culture change and motivation by stimulating demand for e-interactions through the implementation of a number of community based projects including the development of a community portal.
- To establish an integrated ICT infrastructure which provides a high capacity borough wide network and affordable e-Commerce facilities.
- To accelerate the level of e-adoption by implementing an awareness and training programme aimed at developing the skills and capabilities of individuals, communities, businesses and service providers.
- To ensure that all individuals, businesses and communities have the opportunity to participate through the implementation of a digital inclusion programme.
- To provide town wide access to quality, relevant resources to encourage educational, cultural and leisure use of ICT.

4. PROJECT MANAGEMENT

4.1 The LA is managing the project on behalf of schools and will procure services and equipment with the agreement of schools. This will ensure best value through economies of scale using the BECTA Framework
contract and will also ensure that any connectivity is safe. BECTA is the DCSF's strategic partner/adviser for ICT.

A working group has been set up with representatives from each of the six secondary schools and the City Learning Centre (CLC) to steer the project.

The CLC is involved in developing and running a programme for the families that will benefit from this project, particularly through learning platform developments.

Discussions are taking place over a managed service for providing technical support, through the Becta Framework procurement process.

4.2 The project is being led and managed by the Strategic Director for E-learning who also has strategic responsibility for the City Learning Centre. The LA strategic partner for ICT (Northgate) have been fully engaged and are working in partnership to secure successful outcomes for children and young people.

4.3 The Assistant Chief Executive and Assistant Director of Children's Services are monitoring the implementation of the project.

5. PROPOSALS

5.1 This project will target disadvantaged children and families with a computer in the home which will have safe connectivity to the Internet using the child's schools own filtered connections. This equipment will allow students and their parents/carers access to technology they have not previously had. It will enable collaboration and learning in the home between family members as well as allow for an extension to school learning by the pupils themselves.

5.2 The project will also implement a wireless solution (see Section 6) as a backbone to future expansion possibilities using '5.8 technology'. This will be done in two phases to ensure the technology works as required:

Phase 1: 5.8 with a pilot 2.4' local solution in the Dyke House Area. This pilot is designed to ensure that the two systems are compatible. This will be done at no cost to the Local Authority through a grant from One North East via the North East e-Learning Foundation by September 2007.

Phase 2: 5.8 town wide to ensure that the targeted homes receive a free fixed' connection to a safe Broadband connection by end March 2008.
6. **BROADBAND CONNECTIVITY**

6.1 The proposal is to allow for wireless connectivity across the town using a two-tiered system. There are two options, 2.4 and 5.8 wireless connectivity:

- The 2.4 network is the commercial carrier signal and the one used by most home users. Because of the prolific use, it can be cluttered and consequently less stable, less secure and prone to interference. It is, however, very flexible.
- The 5.8 network is less flexible but gives much wider coverage and is cheaper, more reliable, very secure in comparison to 2.4 and less cluttered. This can be converted into 2.4 in a local area where needed (e.g. Marina, shopping centre, libraries etc)

6.2 The two systems are not mutually exclusive however, and the Computers for Schools proposal involves two pilots as explained below.

- Pilot 1 involves using 2.4 technology (dropped from a 5.8 connection via Dyke House School) in the Dyke House Ward as part of the e-learning foundation project through One North East. This solution would require small receivers being placed on some lampposts in the area.
- Pilot 2 involves using 5.8 technology in the Brierton/Manor areas initially with further roll out covering all secondary schools. Installation of the backbone will ensure Borough-wide coverage within weeks of the start of the project. This would allow successful completion of the DCSF required connectivity for Computers for Pupils. This will require 8 to 10 transmitters (A4 size) attached to secondary schools. Small receivers (A5 size) would then be attached to the homes of participants in the scheme. They could then either create a 2.4 wireless network in their own home or have a fixed installation depending upon their preference.

7. **COSTS**

The Computers for Schools scheme is funded by national government through Standards Fund grants. In 2007/08 Hartlepool schools will receive £341,600 for equipment and £71,900 for connectivity. These are one-off grants. Any ongoing costs such as maintenance, expected to be in the region of £10,000 per annum, will be met by schools. Maintenance costs for the computer equipment in the home are met by the suppliers under a 3 year next day warranty. There are costs to the Local Authority in terms of time from the Strategic Director for E-Learning in co-ordinating and managing the project and from the ICT team in providing training and support for schools, families and children in the implementation of the scheme. In addition the LA is making a one off cash contribution of circa £60,000 to the cost of the wireless
connectivity element of the project funded from the department's Broadband reserve.

8. RISKS

8.1 As with any initiative, there are a number of risks that we need to be aware of and mitigate against.

8.2 Wireless networks can be at risk of security breaches. To mitigate against this it is proposed that all connections are driven through the Hartlepool Education Network to ensure safe, filtered internet access. This would also prevent access to unsuitable sites as the normal firewall rules would apply. Also the use of 5.8 will enable a more secure network to be established than a town-wide 2.4 system would.

8.3 There is a risk that the solution will not be sustainable after the initial funding regime ends. By utilising the connections available in the school, this risk will be reduced as provision will only be required for ongoing maintenance as opposed to ongoing connection costs such as a fixed broadband line in the home provided by private communications companies (e.g. Virgin Media, BT, Orange) where a monthly rental cost is required.

8.4 Public health issues surrounding the safety of wireless connectivity have been highlighted recently in the Panorama investigation. In response to this, Becta has been in contact with the Health Protection Agency (HPA) - the government agency responsible for health and safety - to obtain the latest guidance on any health issues relating to wireless technology. The HPA's guidance remains the same. The latest advice on their website reads:

"On the basis of current scientific information wi-fi equipment satisfies international guidelines. There is no consistent evidence of health effects from RF exposures below guideline levels and therefore no reason why schools and others should not use wi-fi equipment."

Based on this guidance, and expert safety advice, Becta believes that there is no need to change its current guidance: while secure wireless networks can complement an institution's wired network, they should not replace it.

8.5 This project will bring considerable educational and social benefits to some of the most disadvantaged children, young people and their families in Hartlepool. Not proceeding with the project increases the risk of failure in narrowing attainment gaps between pupils from disadvantaged backgrounds and others which, although closing, remain stubbornly high.
8.6 The Computers for Schools project will be a forerunner in terms of connectivity and collaborative working for Building Schools for the Future which has at its core the transformation of learning and teaching for all children and young people. This project is focused on developing personalised learning in an ‘anytime, anywhere’ culture. Failure to implement puts at risk being better prepared and equipped to meet the challenges of BSF in the near future.

9. **BENEFITS**

9.1 The Computers for Schools scheme directly targets the most deprived areas of Hartlepool in terms of “Super Output” areas. In total over 700 homes will receive up to date, modern technology they would have difficulty in providing for themselves. The computers will be used not only by the pupils but also by their family. This extends the target group to approximately 2000.

9.2 As connectivity will be driven through schools and the Hartlepool Education Network, internet connections will be filtered and more safe for end users than generally open connections via normal providers. Also pupils will be able to gain direct connection to their work at school and the Learning Platform for Hartlepool. In addition, this connectivity can be sustained past the initial year of funding at minimal cost (i.e. only maintenance needs covered) as opposed to standard provision which invariably means ongoing costs of on average £15 per month per home (i.e. £10k per month for people in the scheme). Such maintenance is likely to be in the region of £5k per year in total. This ensures the project can continue to make an impact year on year.

9.3 The computer equipment will always be owned by schools meaning that once a targeted child leaves school, the option is there for the school to pass on the equipment to another family. Also, the equipment is maintained by the suppliers so as not to become a burden on school technical resources.

9.4 Support mechanisms for the project led by the City Learning Centre means that there is direct training and targeting of skills to those families involved.

10. **RECOMMENDATIONS**

Portfolio Holders approve the implementation of the Computers for Schools initiative which provides disadvantaged children and families with computer facilities including broadband connectivity.
11. CONTACT OFFICERS

Further information on this matter may be sought from:
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