Building Schools for the Future

London Borough of Haringey

Outline Business Case
March 2006

Volume 4
Transformation with ICT

www.haringey.gov.uk

partnerships for schools

Building schools for the future

HARINGEY COUNCIL

Table of Contents

Building Schools
       for the Future

Section 1
Our Strategic Aims for ICT

1. **Our Strategic aims for ICT**

Our overriding vision is for all children and young people in Haringey to be happy, healthy and safe with a bright future. Bright Futures, our Haringey wide strategy for secondary education is set out in our Strategic Business Case (SBC) and the ICT provision in all secondary schools is informed by how we enable that.

The realisation of the education vision requires a step change to take secondary education from a climate of continuous improvement to a climate of transformation. We aim to describe this transformation, particularly the transformation enabled by ICT, in more detail in this document. The vision is organised around five strands that all contribute to change and example outcomes from our SBC are shown below:

Strand 1: Young People in Haringey

- Listen to the views of young people to ensure that we design our services around their needs to help them achieve their ambitions.

- Improve young people's access to independent information, advice and guidance.

- Substantially increase young people's access to ICT so that they have greater flexibility in how they learn, become more independent learners and have access to a wide range of information to help them to make wise choices.

Strand 2: Learning and Teaching in Haringey

- Substantially extend the range of pathways and locations for education and training 14-19, so that more young people are inspired by what they are learning and are enthusiastic to stay on in education post-16 or are successful in securing rewarding employment.

- Provide more out of hour access to learning, especially for those young people with limited resources at home, thereby extending the services that schools offer.

- Make a significant investment in ICT with an associated and extensive change management programme, so that all staff are confident and competent to use ICT to transform outcomes for young people.

Strand 3: The Haringey Leader

- Continue to promote and support school self evaluation and peer review, so that leadership at all levels has a strong focus on the progress of every young person and how their needs are being met.

- Transform the way that ICT is used to support school management and to engage with the local community and the wider world.

Strand 4: The Haringey Parent and Community

- Ensure that all young people and their families have access to high quality independent information, advice and guidance, including careers advice to enable young people to make wise choices about their educational and employment pathways.

- Strengthen parent and community access to learning by developing extended school services in every school.

Strand 5: The Haringey School

- Make an early and significant investment to transform the provision and use of ICT.

- Develop on-site support units in all schools to enable more students with social, emotional and behavioural difficulties (SEBD) to receive multi-agency support.

Our ICT Strategy is informed by the e-strategy and is based on the guiding principles which underpin our approach to ICT, namely that provision will be area-based, scalable, robust, simple to use and integral to the school environment. It is viewed as a service that establishes the basis for the long term innovative use of ICT, as an agent for change, enabling teaching staff and pupils to transform the way they work. We anticipate this reliable platform will inspire stakeholders who may previously have been politically or emotionally excluded from using ICT to support their work.

Our whole cluster has executed a bottom-up approach to specify our ICT enabled need via a series of ICT Working Groups, featuring all schools within a transparent and facilitated process. This strategy aims to win the hearts and minds of our stakeholders and engage everyone in a collective examination of our achievements and shared potential challenges to date.

As a result, all schools concur with Bright Futures and that our compelling priorities with ICT are:

- To transform learning and teaching through ICT

- To transform team efficiencies and effectiveness through ICT

- To transform our system to be open, accessible and inclusive

Please see Bright Futures for further examples of activities under each of these priorities.

This strategic approach to bring 'hearts and minds' together is led by the ICT Senior Officers Group which comprises Head of Secondary Standards, specialist ICT officers from Children's Service and Corporate Services, coordinated by a Place ICT Transformation Consultant and chaired by Justin Holliday, Assistant Chief Executive.

The ICT Working Group has supplemented this group where necessary. We anticipate that the ICT Senior Officers Group and the ICT Working Group will evolve and join to become the SMB ICT Working Group. This reflects the more strategic and decision making contribution that will be required during this tender negotiation period, such as the monitoring and evaluation of contracts. We believe that this group of Senior Officers, stakeholders per school, the ICT MSP and other advisors where needed can guard the vision and enable this transformation to happen.

The final outcome will be an environment where the person, building, ICT and culture work seamlessly together, in a mostly automated fashion for the end user, to enable each stakeholder - learner, teacher, support staff, parent, etc. to reliably access and interact with their each other and their relevant learning objects.

We envisage being able to offer the learner more ways to learn, working with other learners, being creative, learning through challenging, game-like activities and materials that adjust to them. We envisage more subjects to choose from, more flexible study and easier ways to try things out. We envisage a personal online learning space: where you can store electronically everything related to your learning and achievements, course resources, assignments, research, and where you can plan your next steps, and build links to help the learner to move on.

Building Schools for the Future

Section 2
ICT Enabling our Individual School Visions

2. ICT enabling our Individual School Visions

Each Individual School Vision (ISV) was developed within the context of Bright Futures and sets out the context of the school within its local community, its vision and objectives, its strategies for improving teaching and learning, and points towards the learning environments required to deliver the vision.

As part of the vision to reality change management process, the following points have been identified by each school as levers for transformation via the embedded use of ICT and the solution offered should aim to maximise this opportunity.

At Gladesmore, we have identified these four levers:

- On demand access – we envisage portable/mobile ICT facilities throughout the school and complemented by a central Learning Resource Area accessible to the local community and small localised and specialist (e.g. Humanities) resource areas independent learning through the provision Virtual Learning Environments complemented by traditional non-digital resources and staffing expertise.

- Teachers effectively using ICT as a classroom tool – we envisage learning delivered by MLE supplemented by additional on-line content and support. We envisage communication tools to support greater collaboration between colleagues in developing programmes of ever higher quality.

- Significantly more efficient administrative functions – we envisage the monitoring of student activities and progress are routinely recorded which enables early support and intervention.

- Enhanced communication with parents – we envisage keeping parents/carers informed when they need to know rather than when a report cycle is due. We believe that making information on student progress available would greatly empower staff and parents in tackling disaffection and underachievement.

At John Loughborough, we have identified these four levers:

- Flexible access to learning – we aim to develop the use of hand-held PCs (to be piloted in Year 7) and access support with a loan scheme for families without PCs at home.

- Integrated Storage – we envisage improved storage for staff and students to best support ICT resources.

- Enhanced SEN – we aim to adopt and use wide and varied teaching styles to meet the needs of individual students such as the use of voice activated software for our dyslexic students, speech assisted software, audio-visual and multi-media resources, interactive whiteboards and video conferencing resources to support the needs of all our learners.

- Enhanced communication – we aim to empower parents to provide greater support to their children, as well as engage in learning themselves

At Northumberland Park Community School and the Vale School, we have identified these four levers:

- Enhanced curriculum – we aim to embed ICT across the curriculum through specialised subject-specific applications so that each curriculum area becomes a stimulating ICT-rich learning environment

- Personalised Learning – we aim to develop an MLE for any time, anywhere access to a broad range of e-learning opportunities for students, parents and community learners; it will offer a wide range of curriculum content and assessment, attendance and other MIS information

- Community provision – we aim to enhance our developing role as an extended school by providing a centralised learning resource centre and library, alongside facilities that offer flexible e-learning spaces for large and small groups; these state of the art amenities will benefit the whole community and in particular the students and parents of our school, with a view to raising their aspirations and achievements to the highest level

- Inclusion - we intend to extend our pioneering developments for students with complex physical disabilities and communication needs to transform their learning experiences through enhanced access to the curriculum facilitated by the innovative application of technology, not just within the Vale but also across all departments of the campus to promote greater inclusion.

At Park View Academy, we have identified these four levers:

- To develop a learning culture in which all students become effective, independent, self-motivated learners – we aim to teach students in large groups with the opportunity to break up into smaller groups to complete the unit of work. We aim to use para-professionals, teaching assistants or other adults to support groups and individuals.

- To develop the school's distinctive pioneering identity as an extended school – we aim to encourage the whole community into the heart of the remodelled school to use a state of the art, ICT-rich Learning Resource Centre and enable parents to support their children's learning by accessing the school's curriculum, schemes of work, assessments and students' progress, especially those who do not have PCs at home.

- To enable every student to improve – we envisage a Personalised Learning approach by providing a mixture of small and large spaces, the use of the network of schools to widen the provision of a range of technologies, with appropriate staff support

- To provide a curriculum speciality, a sense of occasion and promote unity - we envisage developing our Performing Arts specialism, with languages, via a new Performing Arts block equipped with modern facilities for drama, music, dance and visual arts where we can promote the student voice, the extended school, performance and a united ethos to celebrate success.

At St Thomas More, we have identified these four levers:

- Ownership of learning - we want to encourage students to be more involved in managing their own learning by developing their understanding of the assessment of their work. This Managed Learning Environment will support remote learning for disengaged and disaffected students, enabling lessons, schemes of work, homework and assessments to be accessible at home as well as at school.

- Personalised Learning – we envisage giving students access to the kind of learning they need, in a convenient location and at the time they need it, with guidance in their choices from teachers and mentors. We envisage a mixture of specialist and generic multi-purpose classrooms suitable for a range of subject specialisms and equipped to a high standard to meet the demands of a changing curriculum delivery

- Enhanced curriculum – we aim to develop modern vocational facilities to better equip our students for their working life. This will include a new performing arts facility to allow specialist practitioners to contribute to teaching as well as enhancing the curriculum offering with ICT.

- On demand access – we aim to provide a centralised learning resource centre and library as a hub for access to reference materials in electronic formats, private study and in whole class scenarios. We envisage creating different areas for different activities and users and providing up-to-date ICT facilities to support school and community use.

At White Hart Lane School, William C Harvey School, and Moselle School we have identified these four levers:

- Transform learning - Put ICT at the heart of classroom teaching and learning to improve motivation and achievement, promote e-learning and develop skill levels which are compatible with 21st century employment opportunities

- Enhance community provision – we envisage a large, flexible space, with capacity for 200-300 people, serving as an on-site community centre and for school year assemblies. It will be equipped with state of the art media and ICT facilities, giving it a multi purposed function as a drama, dance and music performance area

- Effective Inclusive Campus – we envisage a wireless, roaming, always available system to enable our proposed pastoral structure with the increased role of support staff in the classroom. We aim to respond quicker and more efficiently to absence, truancy and the use of tutors' time.

- Specialising in Inclusion – we aim to lead the innovative application of technology to assist the learning, communication and sensory stimulation of pupils with complex disabilities. We aim to contribute to the inclusive campus across secondary subject departments.

At Alexandra Park, we have identified these four levers:

- Extend the use of interactive technology to every classroom – we aim to embed ICT as an active and interactive tool for learning to underpin and drive the curriculum, focusing on our strengths in Science, Mathematics, arts and media specialisms with methodologies for assessment and behaviour

- Develop the existing range of pedagogies and promote an imaginative and innovative teaching style - ICT will allow Alexandra Park School staff to provide a range of learning preferences and styles, owned by the learner and supported by access to a wide range of ICT facilities, from mainstream to special educational need and to encourage a personalised learning culture.

- Extend our well-established curriculum – to offer Haringey students vocational specialisms by developing timetabling flexibilities including extended days, informal meeting spaces and flexible spaces for project work to facilitate collaborative work with other Haringey schools, local businesses and industries.

- Enhance parental involvement - to target the hard to reach parents to keep in touch with the day-to-day events at the school, to build closer relationships with the school and other parents, to support remote learning for disengaged and disaffected students, to enable access to lesson plans, schemes of work, homework and e-assessments anytime, anywhere via the MLE, enhanced communication tools and purposely designed parents' areas with ICT

At Fortismere School and Blanche Neville School, we have identified these four levers:

- To raise standards through enhanced personalised learning – we aim to provide interactive technology in every learning space, anytime anywhere access supported by academic tutoring, assessment for learning, homework, acceleration, extension and by developing a more proactive approach to target setting and pupil tracking with students and their parents at the heart of the new processes.

- To provide a safe, secure and happy environment – we aim to provide attractive areas for students to meet outside of lesson times with the appropriate use of technology and identity cards for the whole school community to dramatically increase the accessibility of the site and its facilities with multi-agency space.

- To enhance and effectively manage collaboration - we aim to build stronger links with other secondary schools and with businesses to develop a wider range of vocational courses and to provide further careers advice and guidance.

- To provide an inclusive and specialist curriculum based on our learners needs – we aim to provide high quality acoustic environments for speech intelligibility and sound, particularly for deaf and hearing impaired learners.

At Highgate Wood, we have identified these four levers:

- Students managing their own learning – developing understanding of the assessment of their work, more open access to learning for students and staff. We will explore the extent to which e-learning can be used to enhance the delivery of the curriculum supported by small and large spaces and a Learning Resource Area with portable devices

- Increase parents' capacity to support their children's learning - to develop a MLE that allows parents to interact with the curriculum, assessment, their children's progress, etc. supported by parent access for those who need it, in small, focused and ICT-rich spaces for group and one-to-one work, confidential spaces for interviews and meetings with parents and external support agencies

- Extend the school into the local community – to link to libraries, other Haringey schools, post-16 providers and local businesses and feeder primary schools, to learn more about pedagogic practice, information sources, good practice and collaborate to provide a wide range of specialist 14-19 pathways

- To offer specialist ICT facilities - to develop media as a subject area and create a Media TV Studio, a web design suite, Performance Theatre and specialist, high level provision to support the needs of 12 young people with severe and complex visual impairment (VI) needs

At Hornsey School for Girls, we have identified these four levers:

- Enhanced ICT access - enabling ICT use across the curriculum through subject-specific applications; an enhanced centralised electronic learning resource centre; and a MLE offering staff and students anywhere, anytime access to the information they need

- Students owning and interacting with their learning – to develop creative and stimulating teaching with all our students actively engaged in and managing the learning process via a PLP and well supported pastoral team

- Extend the transition of learning around the school – to support pupils from KS2 to KS3 by strengthening the links with our local primary schools and collaborate to provide a wide range of specialist 14-19 pathways

- Enhanced school and staff organisation - to rearrange faculty areas to each have their own ICT facilities, curriculum resource and meeting spaces in order to improve the delivery of middle tier management and enable curriculum team work to be further enhanced

At the New School, we have identified these four levers:

- Flexible spaces – we envisage multi-functional learning spaces suitable for a range of subjects including vocational programmes, able to accommodate a range of group sizes and all equipped with the latest interactive technology. We also envisage an ICT-rich Learning Resource Centre with large spaces for assemblies, public examinations and safe, secure spaces for informal student interaction including common rooms and flexible, professional work spaces for preparation, meetings, and informal interaction

- Specialist curriculum provision – we envisage extensive visual arts and media production facilities and full curriculum access for people with disabilities and/or sensory impairments

- Anytime anywhere access and use across the curriculum through subject-specific applications that are evaluated and supported by change management techniques and the lead professionals programme with remote access to all the information needed via a Haringey wide MLE.

- Fully inclusive and open system – we envisage implementing a solution that aims to break the link between disadvantage and low achievement in order to create prosperous, inclusive and sustainable communities for Haringey in the 21st century.

At the PSC, we have identified these four levers:

- Re-engaging pupils with their learning – we envisage introducing a vocational curriculum that is enabled by ICT and an academic curriculum that is inspiring and motivating via the integration of media, music and video in each major learning space

- Develop core skills – we envisage providing good software and available access to encourage learners to improve core literacy, numeracy and ICT skills via regular feedback and available support

- Enhanced physical learning environment – we envisage secure and fixed ICT which maximises the time on task and provides good zonal control and monitoring of the site to support problem resolution

- Enhanced virtual learning environment – we aim to build on the success of online managed learning by offering the Haringey Managed Learning Environment as an online entitlement to learning, supported by a flexible pastoral presence at the PSC and access across Secondary Schools

Building Schools for the Future

Section 3
A Day in the Life of the Vision

3. **A day in the life of the Vision**

A day in the life is a scenario of a Haringey stakeholder, imagined at a point in the future. This exercise conveys our aspirations for the embedded use of ICT in our community and paints a rich picture of future learning in Haringey. It should be used by all stakeholders between now and deciding and contracting the ideal solution, to challenge what we understand to be the needs and future scenario of each Haringey stakeholder. We invite our Industry partners to work with us in partnership to fulfil these scenarios.

Strand 1: Young People in Haringey

Kamal checks his personal digital device (PDD) during registration. He has an e-mail from his English teacher who has reviewed the first draft of his coursework and suggested changes he can make. He'll be able to do them by tomorrow's lesson when he'll see him face to face for further feedback.

Kamal's tutor registers him and the system automatically sends out text alerts to those students and their carers who are absent. He is really excited about his next lesson which is Geography, because the class is going to have a video conference with a Volcanologist from Indonesia. Kamal has been watching the Volcanoes web cam all week and taking part in the discussion forums.

During break he uses his PDD to check what's for lunch – he'd like the pizza, but his healthy eating diary tells him that he should have the fish and steamed vegetables. After lunch, during his science lesson, the teacher uses a Visualiser to magnify the experiment onto the IWB, the teacher then uses the editing function so that the students can pause, rewind and play the experiment again. Kamal stores the experiment on his PDD so that he can annotate it with questions and send to his learning mentor who works for a pharmaceutical company.

After school Kamal goes to his younger sisters (Aaysha) primary school, where he accesses his homework diary and keeps track of his Fathers e-conversation with Aaysha' teacher about her progress in maths. His father is away for a couple of weeks and has asked Kamal to keep an eye on her.

Henry, an intelligent Year 10 student has cerebral palsy of an athetoid type, which affects his whole body. This makes it very difficult for him to control and co-ordinate his movements. His condition means he is unable to use his limbs functionally. His fine motor skills and ability to speak are impaired, and he is dependent on others for his personal care needs.

Henry uses his head to manipulate a device that helps him access the curriculum. The device is mounted onto his electric wheelchair. He uses this device to communicate his thoughts and ideas and to answer questions during lessons. The same device is used to verbalise his opinions in a class discussion. The teacher remotely accesses the device to download the relevant class notes.

Through the device Henry is able to remotely link to, and have full control of any computer in the class. Once a link is established he downloads his lesson notes and independently attempts the task set by his teacher. During the plenary the device is used to remotely access an interactive whiteboard. He is able to manipulate the curser to select the correct answer.

In the New Media Course across the hall Kimberley has been charged to come up with proposals for new projects to present to their classmates to teach an old subject in a new, better way. Kimberly goes first. She sets up a keyboard and some tattered old sheet music to demonstrate how she first learned to play the piano. Her idea is to set up a website to teach people how to read music. She imagines this as much more fun and interactive than the way she learned. The other students respond enthusiastically. Kimberly tells the class she needs a flash person, a 3-D modeler, and a website programmer. She'll manage and be responsible for content. Her ideas are written up with all the others, the class needs to vote on which Projects to develop further.

Strand 2: Learning and Teaching in Haringey

In Technology, the lesson starts with whole-class input from Mrs Dyson – on the use of air controlled devices. Mrs Dyson uses her Personal Digital Device (PDD) to control displays and interactive lesson materials on screens on two of the walls of the workshop space. After 20 minutes, the students use their PDD to complete a quick review test of the work done so far. After linking and being assessed by the MLE this feedback confirms to Mrs Dyson that the learning objectives of this section of the lesson have been met by Rob and his team so they can move on. They agree Nisha will use Computer Aided Design/Manufacture techniques and equipment, Rosh will develop the project's graphics while Rob links to worldwide research just released by Oxford University.

Later on, Mrs Dyson gathers a number of the products the class has been working on to show to the whole group. Rob's work has been chosen. Using cameras and his PDD Mrs Dyson is able to project detailed enlargements of his groups' work onto the screens. The class discuss the work seen and are able to complete design appraisals via their PDD which can be summarised by the MLE on the display screens. The images, appraisals and comments they make are stored by the MLE and will be used later in the final appraisal of the work when it is marked for examination purposes.

Mrs Dyson and the other Haringey wide lead innovative professionals are looking forward to the annual Haringey Celebrating Success Conference at the end of the month. She has been working with this group using Change Management techniques to reflect on what is really effective to inspire learning. She likes the motivating and coordinating role of Mr Fisher at the CLC but most of all it is the technique she uses once a month to capture her learners inputs into how to make her Programmes of Work even better. She feels this puts her at an advantage over her peers because she can really evidence the impact her recent assessment for learning innovations are having.

However, Miss Mockler has been working with Mr Singh and Mr Barron on a Haringey wide innovation with PDAs, a private software company and the National History Museum. This new partnership allows learners to interact with the facilities at the Museum in a personalised way, based on wireless trails that started with the teachers above but has since gone global across all the schools. There is a rumour that some students have started a similar trail with the Science Museum to bring science to the local primary schools, which if true is some stiff competition for Mrs Dyson.

Strand 3: The Haringey Leader

In the Governors meeting, the chair Mrs. Khan is accessing the web-based School Central Evaluation network using the interactive wireless slate in the community presentation room. She is demonstrating on the display screen what improvement actions have been completed and showing by example and evidence what impact those actions had on Teachers and Learners in their school. Appropriate responses and evidence are submitted to the UK School Inspection Service allowing them to share the improvements within the school. New improvement topics are immediately allocated to the most appropriate stakeholder within the wider school community and everyone is able to impact on the schools' self evaluation and peer review process.

Later on, Mrs. Khan also shows the shared development plans that enable leadership at all levels to have access to and demonstrate how their actions have a strong focus on the progress of every young individual in their school and amongst other Haringey schools and colleges as part of the whole Haringey Learning Environment. She is particularly happy to inject video and photo based evidence to support the statistics and results analysis and allow her to rest her voice! She reminds Governors that the school visit report forms are to be completed here on-line and are filed electronically so they no longer get lost and that according to recent statistics they had over

a thousand hits last month that resulted in downloaded files and evidence so their wider communication and dissemination strategy is above target! Then Mrs. Khan receives an automated text message alert reminding her to address the Every Child Matters objective of Being Safe when she feeds back to the School Premises Committee later that week.

Ms Amy Hughes sets up her lesson on the Interactive Whiteboard. She uses the lesson plans and schemes that she has developed over the years, though now (through collaborating with others) they have been digitised and integrated into the MLE. Prior to the lesson, she has agreed with Ms Keelin Keogh the particular classroom techniques she will be modelling for a group of Newly Qualified Teachers (NQT) – today it is the development of higher order thinking skills through structured paired talk. Ms Hughes has set up a video link between her classroom and the room where Ms Keogh is observing the lesson with the NQTs.

During the main part of the lesson, she models the type of questions and appropriate voice level for this activity. The class is a challenging one, and she uses a range of school-agreed behaviour management approaches to keep the students on task. Ms Keogh is able to analyse with the NQTs the repertoire of teaching and learning strategies that Ms Hughes deploys, without distracting the class.

Half way through the lesson, a message appears on the board from the Educational Welfare Officer asking Stephen to go to see her. Ms Hughes replies by tapping the board, and this updates her class register. In the plenary, the pupils work in pairs to complete a review task, which they then submit wirelessly to the teacher's desk for checking. Lizzy's work is displayed on the whiteboard as an exemplar. At the end of the lesson Ms Hughes reminds the class that their examination will be in two weeks. They all have targets in their personal part of the MLE and she will be sending emails and letters home to every pupil in her year with these targets.

Strand 4: The Haringey Parent and Community

Wayne is quietly confident about tonight's parent's evening at the Career Academy of ICT at the 6th Form Centre. He knows his parents regularly access the Haringey wide independent information, advice and guidance and have really engaged in his career choice and employment. He really likes the one-to-one mentoring by business professionals who provide support and advice on coursework and life skills throughout the course. He is still excited about the video conference with the Product Manager in the US after he posted his coursework on the latest Wi-fi standard to the Cisco forum. On the back of this great work he hopes to secure a six-week paid internship during the summer, to use the skills he has learned, pick up some latest knowledge from Cisco HQ and develop his business presentation skills using the latest interactive wireless slate.

He agrees with his parent's latest email requesting participation in employer-led seminars, work-site visits, practice interviews and CV development sessions and he has joined in some of the recent web casts on this so he gets the sessions he wants. He especially wants to continue with the current group of students from across Haringey, especially if they get to go to the US!!

Strand 5: The Haringey School

Lara goes to the Pupil Support Centre, Alexandra Park School and Hornsey School for Girls and benefits from the Haringey wide on-site support units in all schools to personalise her learning to her social, emotional and behavioural difficulties. She has more friends than ever and is very happy with the support she gets everywhere.

She used to only meet teachers but she now video links with her doctor and educational welfare officer and has got to join lots of groups in Haringey that have really challenged her personal

achievement. She keeps up to speed with everything going on in all her schools via email, text and video message to her VOIP mobile which also doubles up as her iPOD.

Annabelle glances up at the EntryCam as she nears the entrance to the CLC. The IRISID system scans her eyes and the sliding doors glide open allowing her motorised wheelchair to roll effortlessly into the CLC lobby. She is welcomed by name by the intelligent management information system which informs her that she has messages waiting for her online.

Annabelle is a leading professional teacher, her specialists subjects are Science and Technology. She is seconded to the CLC for one day a week to train other teachers and to run a pilot course using innovative Virtual Reality Environments (VRE's) to teach KS4 students about the Structure of Atoms. She also conducts research into learning and virtual environments using the CLC as her base.

She makes her way to the space designated for her morning class which is due in fifteen minutes. As she enters, the powered doors fold away to transform the space to hold the 25 students she is expecting and allow her powered chair room to manoeuvre . She glances at the video wall at the front of the class. A soft voice tells her that the IRISID has verified her and logged her onto Haringey's VLE. She voice commands the system to display her class's results, and progress reports. She compares them with their individual learning targets and makes a mental note of those pupils who will need extra encouragement this lesson and those that have exceeded their targets and allows the VLE's request to vary the learning tools and environments for these pupils.

The physical pupils arrive and take their seats or park their powered chairs next to their chosen screens. They are joined by the other pilot classes on the side and rear video walls. They are joining remotely for this session from Montreal Jakarta, Montego Bay and Honk Kong.

The session ends and Annabelle makes her way to lunch, pre ordered and paid for via her personal digital device which is docked on the right arm of her powered chair. The space returns to its default state suitable for three seminar groups of ten people.

After lunch Annabelle joins the CLC online Video conference for trainee teachers who are taking part remotely in the leading professional training she is running for her third cohort of teachers. The conference goes well and arrangements are made for the annual physical meeting of different groups of teachers to further share good practice and to network.

Finally Annabelle leaves the CLC after a fruitful day; the IRISID system enables her exit and logs her out of all CLC systems.

Building Schools for the Future

Section 4
Strategic ownership of the ICT Output Specification

4. Strategic ownership of the ICT Output Specification

The ICT Output Specification lists the essential, enhanced and local choice outputs of ICT need identified by the cluster and comprises the four sections as per the PfS template. This coves all the PfS recommended Infrastructure, Operational and Learning requirements, from a Haringey wide perspective, wrapped up by a SBC annual review which will include creative opportunities for Work-based learning, Research & Development etc. We recognise and expect these outputs to comply with the Becta specified minimum output standards, where appropriate and they will be enhanced to include local enablers where stakeholders feel the market is not meeting their expectations.

In each of the sections of the Output Specification, every individual aspect has a nominated LA lead. The LA lead role captures and presents to the ICT SOG the essential, enhanced and local outputs of need and researches a consensus for what constitutes essential performance in the form of a KPI per aspect. We envisage working closely with PfS to learn from national experience to select appropriate KPI to support this work.

The LA leads build on the foundations of our consulted specification of ICT need and serve to accelerate the Output Specifications development. This acceleration will complete the consultation to include the input of other stakeholders within Haringey, such as corporate IT and SEN. Throughout the remaining stages of the BSF ICT implementation, LA leads will champion the benefits and capture stakeholder concerns, suggesting to SOG strategies that will answer stakeholder concerns with that aspect. Each aspect and LA lead is shown in the table below;

Aspect	LA Lead
Infrastructure Requirements	
Network Infrastructure & Services (1.1 – 2.7 Inclusive)	PS
Hardware Devices including Legacy (3.1 – 3.4 inclusive & 5.1)	PS
User Devices (3.5 – 3.7 inclusive)	LF
Local Choice Infrastructure (embedded per aspect)	PS
Specialist Curriculum Resources (8.1 & 8.2)	DW
Operational Requirements	
Performance, reporting, maintenance, helpdesk (7.1-7.6 & 7.9-7.10)	MR
Training (6.1 – 6.4 Inclusive)	LF
Learning Requirements	
Baseline, Advanced and Legacy Software (4.1, 4.2 & 5.2)	SB
e-learning Content & Management – MLE & Content (4.3, 4.6 & 7.8)	SB
Assessment for Learning (4.5)	SM
Management Software – MIS including Legacy (4.4 & 5.3)	MR
Strategic Business Case Requirements	

In January 2006 we completed our soft market testing plan which aimed to input the views of Industry Partners in the market place. We selected 7 providers from the 14 providers short-listed so far nationally in Wave 1 to gain an informal commitment of readiness of the market to work with Haringey and market views on how we could make our business case even better. Six out of seven providers showed commitment and readiness to work with us and they all contributed to the process of making our documentation even better.

In February 2006 we developed the local choice fund aspect to include two elements. The first key element is to describe the outputs of ICT enabled need to provide for the school academic specialisms and the emerging school vocational or other specialisms. These needs have been considered in the light of the emerging "Future Curriculum" debate led by the QCA and the coordinated strategy highlighted in Bright Futures. As the financial model shows, the whole cluster is committed to achieving these aims with approximately £2 million. The second element is a wholly local choice of ICT to enable other local strategies and innovative project work which has been funded at approximately £1 million.

The following table records the version control and release date of the ICT Output Specification as it matures;

Version	Release	Details
1	13/09/05	Compiled by Place Group with no end user consultation as a specification of potential to question current ICT thinking.
2	13/10/05	Mid-way through an on-going ICT Working Group consultation featuring all the local ICT stakeholders as contributors to the document within an open and transparent, facilitated process.
3	01/11/05	After 3 sessions of the ICT Working Group consultation featuring all the local ICT stakeholders as contributors to the document within an open and transparent, facilitated process.
4	14/11/05	After the 4 ICT Working Group sessions and in a new format to encourage Industry to add value and start the internal process of describing Performance Indicators
4.2	29/11/05	After SOG identification of LA lead officer per aspect
5	13/03/06	Including all feedback from soft market testing, outputs required to enable a coordinated specialist curriculum provision and initial lead officer consideration of KPI to measure impact

This process has raised aspiration all round, and will continue to win hearts and minds and spread the ownership of the Output Specification across members of the ICT Senior Officers Group (SOG) and contribute successfully to our overall readiness to engage market and successfully deliver this type of Project.

Building Schools
for the Future

Section 5
Contracting an Industry ICT Partner

5. **Contracting an Industry ICT Partner**

This ICT provision will be the contracted responsibility of an ICT Managed Service Partner (MSP) who will provide a Haringey wide system based on the rich picture of ICT enabled need expressed in our strategic aims, the Individual School Visions and the ICT Output Specification. This MSP will also provide the Council and Schools with rigorous project and risk management, building integration and technical services and effective resource and people management capacity. This long term partnership will maximise the success of ICT provision and support ICT enabled transformation.

Haringey is unique in that it has an existing PFI project for FM services for a large proportion of its secondary school estate and this runs until 2025. The contract is with Haringey Schools Service Limited (HSSL) – a joint venture between Jarvis plc and Barclays – where Jarvis plc's interests have since been purchased by the Secondary Market Investment Fund (SMIF). Haringey Council is keen to retain both the relationship with HSSL and have consistency of service delivery across all facilities in the BSF estate.

As such, we consider the BSF programme will need to be procured in some form of joint working with HSSL and we have therefore developed a procurement model that enables the BSF investment to sit alongside the PFI contract. This model has been called the Joint Programme Management Team (JPMT). Through the operation of the JPMT, the Council is confident that the Education and ICT visions will be delivered across all the BSF assets in a co-ordinated and efficient manner. All relevant stakeholders, including HSSL, have voiced their support for the JPMT model.

The JPMT Board will report into the BSF Project Board. The JPMT Board will comprise a senior representative from each of HSSL and the Council, together with the nominated Project Director for each organisation. The aim is for the JPMT to become a co-located, seamless organisation during the BSF investment programme. The BSF Strategic Management Board (SMB), chaired by Councillor Meehan is the ultimate decision making body. For more information on this JPMT model please refer to the Procurement Business Case.

The scope of the service provided by the MSP will include:

- Management of all relevant contractors to ensure that ICT requirements are fully met;
- Management of the transition between the existing and new ICT arrangements;
- A managed ICT service for all secondary schools;
- Managed procurement of future hardware and software to meet BSF ICT aspirations; and
- Management of a first refresh of hardware & software for all secondary schools.

Due to the rapidly changing nature of technology, our approach to procuring ICT services is to specify our affordability ceiling and then negotiate about the quality of proposals, subject to a range of essential and local choice outputs, and preferably enhanced outputs being satisfied. Our expectation of our affordability ceiling is to use all the capital outlay of £1450 + £225 per pupil and an on-going annual revenue contribution of between £100 and £110 per pupil. We feel this signifies our real and on-going commitment to financially supporting the transformational agent of ICT within Haringey schools and we sincerely hope that the market is able to respond in kind.

We expect that the ICT service will become the fifth utility and the intention is that some part of the payment will be at risk based on performance of the service. This will be implemented by mutual agreement of Key Performance Indicators (KPI) per aspect of the ICT Output Specification, as appropriate.

Building Schools
   # for the Future

Section 6
Phasing and Delivering the Multiple ICT Projects

6. **Phasing and delivering the multiple ICT Projects**

We expect to commence OJEU in spring 2006 to contract an ICT Partner by late 2006. This will allow the ICT Partner to be in place early enough to be able to work in real partnership with the Building Contractor and other professionals, as appropriate. We expect the ICT Partner to use our strategic aims, our Individual School Visions, the ICT Output Specification and our day in the life of scenarios to support the design of innovative solutions to meet our need. This partnership approach should be able to draw a rich picture of how the end users will interact within a technology rich environment and this picture should inform an appropriate and transformational building design.

The ICT MSP is responsible for providing a technical and well integrated ICT based solution that should:

- Aim to optimise the integration of ICT with the proposed built environment.

- Support the inclusion of learners with special educational needs. Obligations are set out in Education Act, and SEN Code of Practice.

- Be flexible and able to accommodate future changes and developments in technology and the curriculum.

- Propose technology that is mainstream (e.g. widely used across education and business sectors) and proven (e.g. fully beta tested and commercially released. In the case of software with at least one update to the original release).

- Consider how best to take account of legacy ICT services, equipment and software in the Local Authority and schools, and propose appropriate protocols and methodologies for dealing with all legacy issues (and, if appropriate, disposal).

- Ensure that during the period of the ICT contract the infrastructure is upgraded to at least current secondary school standards (as defined by Becta) and propose an initial infrastructure which seeks to minimise the costs of future ICT contracts.

- Deal with all Health and Safety issues regarding the Service, including how users will be informed of their responsibilities and liabilities.

- Set out how the service provider will work with the Local Authority to update its Strategic Business Case on an ongoing basis.

In the interim period, until the ICT MSP OJEU has completed, and to serve the above technical and design needs of the new 6th Form Centre which is the first site to be delivered, the Council anticipate the need for a Technical and Design ICT consultant to support the SMB ICT Working Group. In March 2006, Hornagold & Hills Ltd were appointed to supply this need following a fair and proper tender using the Becta ICT Procurement Framework. The installation, commissioning and responsibility of the ICT service in the 6th Form Centre will be a part of the overall BSF ICT service described herein.

The interpretations of our vision will be evaluated by SMB and the SMB ICT Working Group in particular, who will act as Guardians of the Vision. All meetings, decisions and interpretations made by SMB members, officers and the ICT Partner will be fully minuted and transparently shared with all stakeholders on request. All recommendations made by the SMB ICT Working Group will ultimately face ratification or otherwise by SMB and councillors.
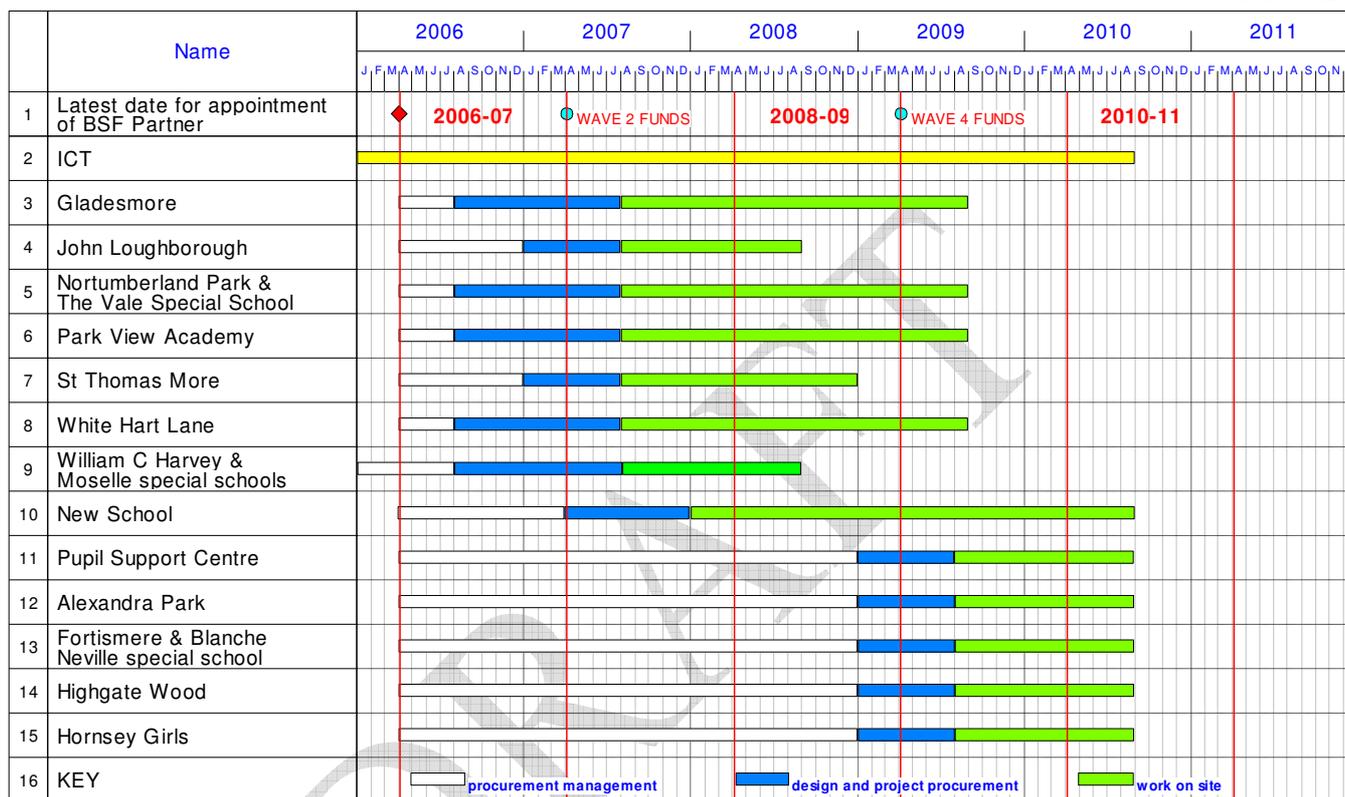
Another challenge will be to deliver this vision within the constraints of a two phase investment process, across multiple sites, with distinct and separate building programmes and issues per site. It will be important to take stock and learn the lessons encountered within each mini phase. The ICT Partner and SMB ICT Working Group will need to meet to plan and review progress

regularly. It will be important to have representation from each site to approve the above converged ICT and building provision and flag any locally specific issues before they happen. The SMB ICT Working Group will lead this work on a per site basis and it is anticipated that an Overall Project Manager will need to be appointed to coordinate this work on behalf of SMB and Senior Officers to ensure that the transformational agent of ICT is maximised through our project.

Haringey BSF

Outline Programme

	Name	2006	2007	2008	2009	2010	2011
1	Latest date for appointment of BSF Partner	◆ 2006-07	● WAVE 2 FUNDS	2008-09	● WAVE 4 FUNDS	2010-11	
2	ICT						
3	Gladesmore						
4	John Loughborough						
5	Nortumberland Park & The Vale Special School						
6	Park View Academy						
7	St Thomas More						
8	White Hart Lane						
9	William C Harvey & Moselle special schools						
10	New School						
11	Pupil Support Centre						
12	Alexandra Park						
13	Fortismere & Blanche Neville special school						
14	Highgate Wood						
15	Hornsey Girls						
16	KEY	procurement management		design and project procurement		work on site	

The current 2 phase investment process for building works is shown in the figure above. The SMB ICT Working Group and Project Manager will need to creatively deliver the ICT Projects around the building works to maximise success. For example, it may be beneficial to implement ICT in those schools that are only receiving minor building work first. This will best be fulfilled by maintaining the current bottom-up approach to visioning and implementing our ICT enabled need.

Building Schools
for the Future

Section 7
Leading and Managing Change in an ICT Rich Environment

7. Leading and managing change in an ICT rich environment

The long term partnership between Haringey Council, the ICT stakeholders described above and the ICT MSP will maximise the success of a robust and appropriate ICT provision, building the foundations for ICT enabled transformation. In order to nurture and support this transformation we also aim to describe and champion transformation and change management principles and recognised organisations that can deliver this. The arrangements for leading and managing change in ICT will not only ensure effective delivery of the ICT vision, but will also enable ICT to contribute to other strands of change management.

This approach will develop an e-confident, supportive, positively challenging, non risk adverse culture to encourage and celebrate transformational success. LA officers will lead and champion access, sharing and communication of information within the Children's Service. LA officers at the CLC and National Strategy team will coordinate an innovative, bottom up approach to ICT training that is related to self-identified performance management needs. We aim to empower and enable real access for the local community to enable the learner to interact, feedback, lead and own their learning strategies. We believe these are the levers to transformation in Haringey and we will expand on the activities needed to realise them below.

The structures we have established to lead and manage the programme are:

- Strategic Management Board (SMB), which is the core consultative forum for stakeholders for all BSF issues. The SMB is the engine to drive forward change across the Local Authority. It is the forum through which strategic decisions are developed and through which progress towards outcomes are discussed.

- BSF Project Board is a group of senior LA officers, chaired by the Director of Finance, which is informed by SMB and takes executive decisions about funding and project direction.

- 4Ps reviews. These are peer reviews which examine the effectiveness of the LA plans in securing change.

- SMB ICT Working Group, comprising senior officers and key representatives from schools and chaired by the deputy Chief Executive to oversee the ICT programme. The ICT group will report up to the SMB and Project Board.

Confidence amongst the workforce in using new technologies is growing steadily and, in part, this has contributed to improving student attainment across the Borough. Although e-confidence is increasing, our first goal is to make full use of leadership programmes that establish a strategic commitment to ICT by all senior leaders. At their meeting on January 25th 2006, SMB made a unanimous commitment for all schools to engage their senior teams and selected governors in "BSF Team SLICT".

We intend to link ICT specialist staff and national strategies consultants to secondary schools to engage in joint training and development through BSF Team SLICT. This well received strategic leadership course takes a change team approach to examine the best approach in an ICT rich environment and in this way we expect system-wide commitment to change management. Working in collaboration with the managed service provider and drawing on expertise in the school and elsewhere, we anticipate a school-based change team will ensure that the most effective use is made of this unique opportunity to transform learning, teaching, management and communication.

Through BSF Team SLICT we expect senior leadership teams to:

- Develop and agree a joint view, a shared commitment to learning, a collaborative model for change and demonstrate mutual support and respect for each other.

- Work together, representing different aspects of school, different approaches to change and engage across all levels and groups.

- Support, challenge and develop each other

- Take the lead role, be responsible for, have authority to and be active in the strategic implementation of ICT in the school.

Represented in the BSF Team SLICT programme we expect:

- The Head teacher - we want every head teacher to provide a strategic lead for the change programme of the school.

- Curriculum leadership - Two members of the school team to be curriculum leaders, either as deputy, associate or assistant heads, and heads of department or faculty heads with a defined teaching commitment.

- Organisational leadership - One member of your team will be able to demonstrate effective change management skills in CPD development or management of non-teaching staff and administrative decisions relating to systems and procedures

- A LA consultant - with a specialism in a curriculum area.

- A LA officer - with an involvement in using ICT to improve organizational effectiveness

Where possible we will encourage governors to engage in the programme, but we will also develop a specific programme for governors to understand the outcomes expected through the change process and to help them to ask the right questions about how ICT is being used to improve school effectiveness. We will additionally expect that the School Improvement Partner will be examining with the school how effectively ICT is being used to raise standards. The SIP will challenge and support the school's own self evaluation processes which we expect to focus in part on the impact of ICT in improving outcomes. Finally the Ofsted inspection procedures will provide an external validation of the effectiveness with which schools are making use of their ICT resources.

Our approach aims to nurture a supportive and e-confident culture where School collaborations produce and promote a collective on-going ICT strategy for the annual SBC review, building on shared competencies and trust. This enhances the skills and competencies of school Transformation Managers through collaborative training programmes and encourages each school to develop change management strategies to utilise the significant investment that will be made. The Transformation Managers role will advise and lead Senior Leadership Teams with a clear transformational action plan, monitoring the strands taking place, including ICT CPD requirements and an identifiable owner of each strand of the plan.

Haringey has an ambition for every secondary school to be a centre of outstanding practice in the use of ICT for learning and teaching and for whole school improvement. There is much good practice of which we can be proud, and in particular, excellence in some specific departments. Our aspirations for transforming outcomes for young people also require an understanding of the pedagogies appropriate for a 21st century education system. Traditional methods – on their own – have not achieved enough and we have both the opportunity and the responsibility to explore new approaches to teaching and learning, leading with ICT.

The ICT Lead professional program is led and managed using the model already established by the Teaching and Learning lead professional program with Ruth Proslmeyr. We all need to recognise that change management necessitates non contact time for colleagues to train, coach, and model their peers through the use of coaching clusters. The CLC will offer a flexible training

program (in terms of time and place) that champions the use of ICT, to ensure that Haringey ICT lead professionals are at the cutting edge in their use of interactive technology to drive learning.

We will continue to engage with groups of pupils in order to refine our functional specification, particularly focussing on how they learn best now, and how they would like to learn with new ICT, refining our selection of appropriate e-learning resources. We will continue to engage with groups of parents and others in the wider school community in order to refine our functional specification, particularly focussing on how they support learning best now, and how they would like to support learning with new ICT.

This is particularly true with hard to reach groups of pupils, where we must use new ways, particularly those disadvantaged by social and economic inequalities. We will outline innovative strategies to provide access to ICT for parents and members of the community, particularly those which are hard to reach, so that they can engage with it in ways which are beneficial to their working lives and their recreation. We will investigate out of school access to ICT being provided wirelessly across Haringey and will provide out of hours ICT learning, including self–teaching ICT programmes, for parents and members of the community in a variety of venues including extended schools, City Learning Centres, libraries, community centres and youth clubs.

Our student focused and flexible approach to learning and teaching will be reflected in the vocational learning programmes that we offer 14-19 year old students, maximising the opportunity for each young person to get exactly what they need and want from our services. This will include using a personalised learning plan (PLP) for each young person, which will detail their learning needs, support requirements and personal goals. The PLP will become a core tool for enabling parents and extended family to participate in their children's progress and be automatically translatable into a range of community languages. We will work with the London Grid for Learning to continue building subject-based online services and expertise, and with London Challenge and subject associations to develop online subject networks across the capital. We will exploit the opportunity to work jointly with staff from CONEL and from local employers to create digital assessment frameworks viewable in a PLP that provides support to children studying at school, college or on work placements. Within five years, we expect every young person will regularly use their personalised ICT resource to access learning anywhere, anytime.

As ICT enables our workforce to remodel, so our teachers will be freed-up to engage more proactively with their students, adopting a role as facilitators of learning. Relationships with the community, industry and parents will become more fluid and there will be an increased opportunity for outreach work, industrial partnerships and more proactive engagement of parents in their children's education, using ICT to communicate with them about their children's progress and coaching them in the use of software programmes to raise student achievement.

Our evidence suggests that schools are ready, but we do not underestimate the magnitude of the challenge ahead. This change management programme and transformation manager role is a very important aspect of our whole BSF Outline Business Case and therefore has its own chapter there. However, investment in ICT should be seen as one of the tools to support transformation which is based on:

- An commitment to the vision set out in Bright Futures, which defines how we want to transform our schools;

- School visions that reflect Bright Futures and set out how each school seeks transformation, including through the use of ICT;

- A commitment to managing school transformation at all levels;

- A clear ICT output specification, developed and agreed by stakeholders, that forms the basis for what we want to achieve as an outcome of the ICT investment;

- A technical specification which defines output measures;

- A set of performance targets, with associated dates and matched to the contractor's payments and penalties;

- An effective partnership with a contractor that is able to deliver on our output specification;

- A structure to monitor performance against the targets and KPIs and;

- Clear lines of accountability at all levels and processes to resolve low performance and/or disputes

The Strategic Management Board (SMB) will provide general oversight of all aspects of the BSF strategy and implementation plan. The group comprises representatives from all schools and key partners. We recommend an e-transform group should be established as a sub-group of SMB to be responsible, on behalf of the SMB, for:

- Promoting, monitoring and evaluating the transformation in schools through the application of ICT

- Monitoring and evaluating contract issues

- Overseeing the project risk register through regular highlight reports from officers and schools

The e-transform group will typically comprise the following roles and their responsibilities are outlined below:

- A Transformation Manager acting on behalf of all schools,

- LA e-transform support

- LA contract support

- The ICT MSP Partner

Each school will establish this Transformation Manager at a DHT level to champion and oversee the change process in schools. The person responsible will drive the school vision for change in all aspects of the BSF investment. The transformation manager will establish a school-based group to act as e-transform champions at all tiers and in each aspect of the school's work.

Additionally at a school level, a post at officer level will be established to oversee the school-level implementation of all contractual aspects of BSF programme, including ICT, through which issues of contract compliance will be channelled and who will provide performance updates to the school leadership team, governors and the SMB e-transform group.

To support schools' e-transform programmes, the LA will establish key staff to support change management to improve educational outcomes. This support will;

- Improve learning through better use of ICT by working with transformation managers;

- Make effective use of management information systems to increase efficiency;

- Improve information sharing;

- Establish effective self-evaluation processes to measure impact of the programme;

- Report progress to governors and the SMB e-transform group;

- Act as school advocates to ensure effective educational support from the MSP.

To support schools' e-transform programmes, the LA will also establish key staff to manage contract compliance. This support will;

- Act on behalf of the LA in discussions with the MSP;

- Assess performance data as defined in the output specification and technical specification;

- Work with schools to monitor performance of the MSP

- Report on the contractor's performance to the e-transform group;

- Act as the contact point for schools where matters have not been resolved by the contractor's fault correction procedures;

- Act on behalf of the LA partnership to propose revisions to adjustments in the specification to achieve best value and;

- Manage financial penalties for non-delivery of contractual commitments.

To ensure effective delivery of the output specification and respond to issues raised by users, schools of the LA the Managed Service Provider (MSP) will need to:

- Provide a change management team to support schools in introducing new processes, equipment, systems and applications;

- Establish systems and structures to enable responsiveness to changing requirements from schools and the LA;

- Provide a helpline and service level agreement for users to report and resolve faults within a given timescale;

- Provide an escalation procedure where faults are not resolved within the agreed timescale

- Allocate a senior member of staff to attend the e-transform group meetings

Building Schools
for the Future

Section 8
Modelling Affordability Options for OBC

8. Modelling and appraising ICT Options and Affordability for OBC

We demonstrate here that the significant ICT investment will be appropriately used and that potential ICT options have been considered in order to develop a value for money ICT solution that meets the objectives of BSF and set out a realistic Outline Business Case (OBC). During February 2006, the ICT Senior Officers Group facilitated ICT Option Appraisal Workshops with all schools in the OBC, represented by Heads, Deputy and Assistant Heads, Bursars, Business Managers and Heads of Department. This workshop helped stakeholders understand the potential outline range of options and evaluate these options in conjunction with an annual, on-going revenue contribution.

The appraisal is based on a financial analysis of the proposed options, called the BSF ICT Cost Model – All Haringey Schools. This spreadsheet contains five interlinked sheets and is fully dynamic to allow immediate "what if?" scenario building and real time option appraising and decision making. The spreadsheet model summarises the affordability position after five years and goes on to show contributions in and out of the ICT Project and affordability after ten years. The infrastructure sheet lists all the typical ICT infrastructure such as access devices from PDA to technology integrated into furniture, network hardware, interactive technology, annual subscriptions, specialist curriculum rooms and local choice fund inclusive of warranty and maintenance support over its lifetime. It also lists services such as Project Management, Installation, Commissioning, Training and consultancy in strategic MIS integration, local ICT technical support and change management in an ICT rich environment.

As we move forward towards a Final Business Case in consultation with the market we can dynamically update the model to reflect current market costs. Before the workshop, Senior Officers had used the data provided in a school audit and a number of linked assumptions to send schools some sample options for illustrative purposes.

All schools received an Option A with a £60 per pupil per year revenue contribution. This option aimed to maximise the ratio of access devices: learners to 1:1 to enable ubiquitous access to ICT, with interactive technologies embedded in all learning spaces and a fully managed service for the 5 year period. There was no additional allowance for on site technical support other than that included in the default managed service option and all other options were as per the default. It allowed a full replacement of perishable infrastructure after 4 years and by the end of the 5 year period the balance of account would be, on average, £300,000 in the red for each school. We therefore proved that Option A was unworkable, unsustainable and not appropriate for all of our schools.

Option B asked the question, assuming the majority of the above assumptions, what level of per pupil per year revenue contribution would provide the core minimum of access, interactivity, learning platform, full managed service and refresh whilst avoid being in the red after 5 years? The benefits of ubiquitous access to ICT and default service were outweighed by the concerns of too much hardware and not enough support and services and assuming the core provision, not enough local development fund for specialising. We therefore proved that Option B was unworkable and not appropriate for all of our schools.

The last option provided in the illustration, Option C started to configure different options, such as allowing a high ratio of access devices to learners such as 1:2, interactive technologies in all learning spaces and the fully managed service for the 5 year period from above as core but with an additional allowance for on site technically knowledgeable ICT learning support as well as that included in the default managed service option. We also increased local choice fund and specialist curriculum provision and annual subscription funds for software and innovations. The default replacement of perishable infrastructure (at the same ratio) after 4 years allowed the same benefits as the above options plus tailoring the provision to meet local need. So Option C was found to be the most workable, sustainable and affordable option of the three presented.

The best workshops went further however and actually started real time evaluating what ubiquitous ICT should be and how ICT could help to achieve our levers for transformation identified in Chapter 2. Many schools were able to paint a picture to start to answer these questions and then go through the model and specify outline requirements in each infrastructure and operational aspect. The dynamic use of the model allowed schools to evaluate these requirements against their current annual revenue contributions to sustaining ICT investment.

These entire outline requirements are displayed as a whole cluster in the BSF ICT Cost Model – All Haringey Schools OBC spreadsheet and the overview sheet is shown here.

Alexandra Park	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 2,283,125	£ 1,411,669	£871,456
Revenue(operational)	£ 772,750	£ 685,860	£86,890
Refresh	£ -	£ 950,825	-£950,825
Totals	£ 3,055,875	£ 3,048,354	£7,521

Fortismere(including Blanche Nevile)	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 2,705,625	£ 1,642,813	£1,062,812
Revenue(operational)	£ 915,750	£ 800,723	£115,027
Refresh	£ -	£ 1,172,800	-£1,172,800
Totals	£ 3,621,375	£ 3,616,336	£5,039

Gladesmore	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 1,695,800	£ 1,028,012	£667,788
Revenue(operational)	£ 611,600	£ 640,679	-£29,079
Refresh	£ -	£ 637,800	-£637,800
Totals	£ 2,307,400	£ 2,306,492	£908

Highgate Wood	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 2,206,675	£ 1,319,851	£886,824
Revenue(operational)	£ 795,850	£ 799,029	-£3,179
Refresh	£ -	£ 879,900	-£879,900
Totals	£ 3,002,525	£ 2,998,780	£3,745

Hornsey	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 2,206,675	£ 1,376,751	£829,924
Revenue(operational)	£ 795,850	£ 716,004	£79,846
Refresh	£ -	£ 879,275	-£879,275
Totals	£ 3,002,525	£ 2,972,030	£30,495

John Loughborough	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 411,750	£ 175,935	£235,815
Revenue(operational)	£ 148,500	£ 185,141	-£36,641
Refresh	£ -	£ 198,950	-£198,950
Totals	£ 560,250	£ 560,026	£224

NPCS & Vale	IN	OUT	Balance after 5 years
Capital(infrastructure)	£ 1,723,250	£ 1,035,553	£687,697
Revenue(operational)	£ 565,000	£ 643,955	-£78,955
Refresh	£ -	£ 583,075	-£583,075

Totals	£	2,288,250	£	2,262,583	£25,667

PVA	IN		OUT		Balance after 5 years
Capital(infrastructure)	£	1,677,500	£	1,059,934	£617,566
Revenue(operational)	£	605,000	£	629,870	-£24,870
Refresh	£	-	£	586,900	-£586,900
Totals	£	2,282,500	£	2,276,704	£5,796

St Thomas More	IN		OUT		Balance after 5 years
Capital(infrastructure)	£	1,738,500	£	1,078,745	£659,755
Revenue(operational)	£	627,000	£	616,834	£10,166
Refresh	£	-	£	656,050	-£656,050
Totals	£	2,365,500	£	2,351,629	£13,871

White Hart Lane(including Moselle and WC Harvey)	IN		OUT		Balance after 5 years
Capital(infrastructure)	£	1,830,000	£	1,084,458	£745,542
Revenue(operational)	£	660,000	£	694,754	-£34,754
Refresh	£	-	£	707,525	-£707,525
Totals	£	2,490,000	£	2,486,736	£3,264

New 8FE School	IN		OUT		Balance after 5 years
Capital(infrastructure)	£	1,830,000	£	1,070,883	£759,117
Revenue(operational)	£	660,000	£	695,904	-£35,904
Refresh	£	-	£	702,200	-£702,200
Totals	£	2,490,000	£	2,468,986	£21,014

PSC	IN		OUT		Balance after 5 years
Capital(infrastructure)	£	122,000	£	122,313	-£313
Revenue(operational)	£	92,000	£	37,177	£54,823
Refresh	£	-	£	53,250	-£53,250
Totals	£	214,000	£	212,740	£1,260

This set of personalised affordability option appraisal workshops allowed all schools to be able to commit to an annual on-going revenue contribution of approximately £110 per pupil to the ICT service. The additional exception to this rule is funding to meet the SEN requirement. This need is being funded separately via the SEN top sliced fund and is delivered through the whole BSF funding channel. This is particularly poignant for the PSC which needs an annual revenue contribution of £230 to sustain the ICT Project due to its relatively small size. This equates to an annual contribution of £18,400 and Haringey Council has agreed to commit this type of contribution. All schools expressed satisfaction with the appraisal workshop and how they were fully involved in a bottom-up process to outlining our transformation with ICT OBC. This will continue as we move forward to specifying our Final Business Case and approach contract agreement.

Building Schools
for the Future

Section 9
Mitigating Concerns by Embedding an ICT Risk
Register

9. Mitigating concerns by embedding an ICT Risk Register

Throughout our bottom-up approach to working with Haringey stakeholders, ICT Senior Officers have sought to capture the challenging concerns expressed and these are listed in the ICT Risk Register.

From the creation of the Outline Business Case onwards, this register will be an ever present item on the agenda of the ICT Senior Officers Group. It is recognised that this approach is fundamentally necessary to succeed in our number one challenge, winning the hearts and minds of our stakeholders.

No.	Major Risk Category	Definition	Probability (Low, Medium, High)	Impact (Low, Medium, High)	LBH	Shared	ICT Partner	L B Haringey mitigation strategy	Risk owner
	Haringey ICT Risks								
Tr	**Educational Transformation**								
Tr 01	Delayed Staff Training	The high turnover and non UK trained backgrounds of staff , particularly temporary cover, results in time delays to be skilled enough to influence learning	Medium	Medium	w				ICT Project Manager
Tr 02	English Language skills adversely affect ICT use	For non English language students with no ICT basic skills, how do they even start to interact with the mainstream curriculum that is digitally based and presented?	Medium	Medium	w				ICT Project Manager
Tr 03	Preparing students for access	That students with high turnover and mobility are not already registered as users and learners within the system	Medium	Medium	w				ICT Project Manager
Tr 04	Maintaining student access	The inability of particular students to remember text based passwords	Medium	Medium	w				ICT Project Manager
Tr 05	Delayed process to implement educational software	The process, lead time, teacher release time and reasonable list management of educational software and it's rollout across the ICT service is unacceptable to Teachers	Medium	Medium	w				ICT Project Manager
Tr 06	ICT is championed but not embedded	The process of transformation and ICT service is overly reliant on the key ICT champion per school and when they leave everything stalls	Medium	Medium	w				ICT Project Manager
Tr 07	Over reliance on ICT	A particularly bad technical or power or terrorist incident overly affects the ability of education to continue in a controlled sense via disaster recovery procedures	Medium	Medium	w				ICT Project Manager
Tr 08	Lack of policy alongside ICT	The malicious miss use of technology is not acted upon quickly enough by the appropriate person at school level due to system process loss in the ether	Medium	Medium	w				ICT Project Manager
Tr 09	Need to change behaviour policy	The current sanctions imposed for malicious miss use of technology would have an even more dramatic affect on their educational attainment and will therefore need wide scale review	Medium	Medium	w				ICT Project Manager

Note: Table header also includes the grouping labels "L B Haringey Risk Register", "TO BE BORNE BY" (spanning LBH / Shared / ICT Partner), and "Suitable advisors to be used on issues identified in risk register where appropriate".

Ref	Risk	Description									Owner
Tr 10	Need to embed training in performance management	The support for all staff will need to expand beyond the ICT based training provided by the MSP and will require a Performance Management type process interlinked which requires management overhead and may drive out non ICT friendly staff	Medium	Medium			w				ICT Project Manager
Tr 11	Staff refuse to use ICT	The staff refuse to move out of their comfort zone and integrate the ICT into the daily job	Medium	Medium	w						ICT Project Manager
Tr 12	Appropriate staff training	The training will not be inspiring and relevant enough to groups of teaching and non teaching staff, within time, such that we lose their hearts and minds	Medium	Medium	w						ICT Project Manager
Tr 13	Perceived trust in reliability	Teachers won't take risks to try new ways of learning with technology because of a perceived lack of trust in ICT reliability	Medium	Medium			w				ICT Project Manager
Tr 14	Delayed change in curriculum and assessment models	The lack of change in curriculum and assessment will likely lead to a reduction in change of teaching approach by many teachers thus making the technology redundant	Medium	Medium	w						ICT Project Manager
Tr 15	Loss of portable devices	By introducing lots of portable devices, pupils will get bullied and the laptops etc. will get stolen	Medium	Medium	w						ICT Project Manager
Tr 16	Crime affecting access	The local criminal population steals our projector / ICT and vandalises our environment that adversely affects our delivery	Medium	Medium			w				ICT Project Manager
Tr 17	Key stakeholder engagement	Some key stakeholders holding senior positions within the Authority and Children's Service are not fully engaged with the transformation agenda	Medium	Medium	w						ICT Project Manager
Tr 18	Key stakeholder engagement	Some key heads are not fully engaged with the transformation agenda	Medium	Medium	w						ICT Project Manager
D	**Design**										
D 01	Specification – output requirements	Risk that initial specification is a complete and accurate reflection of the LEA's business and educational requirements is LEA risk. However, LEA will want to involve ICT Partner in subsequent versions of the detailed specification, particularly to ensure that the specification achieves the 'Key Characteristics' of BSF ICT provision.	Medium	Medium	w						ICT Project Manager
D 02	Specification – Technical Solution	ICT Partner risk that technical solution meets the specification.	Medium	Medium				w			ICT Project Manager
D 03	Changes in specification – output requirements	LEA requirement to keep specification up-to-date (see comments above).	Medium	Medium	w						ICT Project Manager
D 04	Changes in specification – Technical Solution		Medium	Medium				w			ICT Project Manager
D 05	Changes in design …	… caused by construction related issues. ICT Partner will be exposed to New Business Risk on integration of both Building and ICT contract.	Medium	Medium	w						ICT Project Manager
D 06	Changes in design …	… as a result of all other reasons, (including changes in external influences, for example, H&S legislation), except where caused by change in spec.	Medium	Medium				w			ICT Project Manager

Ref	Risk	Description							Responsibility
D 07	Future proofing of design	ICT Partner to maintain minimum standards of technology / software over the lifetime of the contract (to the extent determined by the specification, for example, extent to which increases in service levels over time are built into specification).	Medium	Medium			w		ICT Project Manager
D 08	Failure to build to design, where	… the design cannot be built / technology is inappropriate.	Medium	Medium			w		ICT Project Manager
D 09	Failure to build to design, where	… caused by construction related issues, eg density of walls preventing wireless network operating. ICT Partner will be exposed to New Business Risk on integration of both Building and ICT contract.	Medium	Medium	w				ICT Project Manager
IC	**Installation & Commissioning**								
IC 01	Change in building design impacting on ICT installation, where …	… caused by a change in the LEA specification.	Medium	Medium	w				ICT Project Manager
IC 02	Change in building design impacting on ICT installation, where …	… the building was not built according to specification. ICT Partner will not take responsibility for Building Contractor not providing building in accordance with ICT specification, for example, non-provision of a server room. ICT Partner will be exposed to New Business Risk on integration of both Building and ICT contract.	Medium	Medium	w				ICT Project Manager
IC 04	ICT design not working in the 'built' environment where …	… built environment has not been built to specification. ICT Partner will be exposed to New Business Risk on integration of both Building and ICT contract.	Medium	Medium			w		ICT Project Manager
IC 05	Damage caused by ICT Partner (during installation)	Costs escalate beyond worst case assumptions in OBC's financial model	Medium	Medium	w				ICT Project Manager
IC 06	Cost overrun	Costs exceed contractually agreed model assumptions	Medium	Medium			w		ICT Project Manager
IC 07	Security of Equipment	Delivered according to agreed schedule – ICT Partner	Medium	Medium			w		ICT Project Manager
IC 08	Design of training	Training specification – ICT Partner will design specification – will depend on whether LEA signs off on content of training.	Medium	Medium			w		ICT Project Manager
IC 09	Delivery of training	Training from ICT Partner delivered to teachers and staff only. LEA responsible for delivery of training to pupils.	Medium	Medium			w		ICT Project Manager
IC 10	Attendance at training	LEA to decide relevant staff that will require training and ensure attendance levels.	Medium	Medium	w				ICT Project Manager
IC 11	Testing & sign-off	Approval process of installation will trigger part payment. Retention of final installation payment until testing and sign off (after period of live running). Once acceptance made by LEA – this will trigger transfer of risk to LEA. Mitigating factors: § Dependent on who is responsible for defining testing; § the need for continued ongoing maintenance as specified in output spec; and § payment under the service agreement for keeping technology up-to-date.	Medium	Medium	w				ICT Project Manager
Op	**Operational Services**								
Op 01	Failure of service after final acceptance		Medium	Medium			w		ICT Project Manager

ID	Risk	Comments							Owner
Op 02	Availability of service		Medium	Medium				w	ICT Project Manager
Op 03	Asset Management	Not to be confused with Fixed Asset Register for accounting purposes. ICT Partner will be responsible for recording of physical assets, detailing description of asset, location, bar code identification number, etc	Medium	Medium				w	ICT Project Manager
Op 04	Theft, disappearance, loss		Medium	Medium	w				ICT Project Manager
Op 05	Accidental Damage / Vandalism, etc by users and other third parties – during school hours		Medium	Medium	w				ICT Project Manager
Op 06	Accidental Damage / Vandalism, etc by users and other third parties – outside school hours	As long as ICT Partner has responsibility for security	Medium	Medium				w	ICT Project Manager
Op 07	Damage caused by ICT Partner (during operations)		Medium	Medium				w	ICT Project Manager
Op 08	Availability of consumables	ICT Partner to provide consumables such as ink cartridges, toner, printing paper, etc	Medium	Medium				w	ICT Project Manager
Op 09	Price of consumables	ICT Partner to provide consumables such as ink cartridges, toner, printing paper, etc on basis of Schedule of Rates.	Medium	Medium				w	ICT Project Manager
Op 10	Volume of consumables	LEA retains volume (usage) risk	Medium	Medium	w				ICT Project Manager
Op 11	Creation of user accounts	LEA has administrator permissions. Will be able to set up pupils / users with access to applications. Have authority over access to restricted applications. ICT Partner owns risk of providing the necessary facility.	Medium	Medium		w			ICT Project Manager
Op 12	Security of data (including back-up, recovery, etc)	§ 'Known' viruses – ICT Partner § 'Unknown' / 'pupil caused' viruses – LEA § Hackers – ICT Partner	Medium	Medium		w			ICT Project Manager
Op 13	Licences	§ Curriculum software – LEA § ICT contract provided software – ICT Partner	Medium	Medium		w			ICT Project Manager
Op 14	Hosting Service (if present)	Installation and maintenance of National Curriculum software (subject to Pre Acceptance Testing). With 'Local Choice' – LEA will choose from a catalogue approved by ICT Partner.	Medium	Medium				w	ICT Project Manager
Op 15	Lose of technical support in the interim period	As the ICT MSP startdate comes ever closer, current school based technicians leave the cluster early and the school and LA are left short staffed	Medium	Medium	w				ICT Project Manager
Te	**Termination**								
Te 01	Demand – where service no longer required	§ Sharing of risk. Not PFI scheme, but managed service. LEA will be required to give ICT Partner notice of termination (3,6,or 12 months) - LEA § Subject to notice period – ICT Partner risk	Medium	Medium		w			ICT Project Manager
Te 02	Residual Value	Ownership of ICT will be with public sector	Medium	Medium		w			ICT Project Manager
HS	**Health & Safety**								

HS 01	*Usage of technology / furniture	Risk will be allocated according to situation, for example: § ICT Specification (output based) – ICT Partner must meet statutory requirements in respect of Health & Safety – ICT Partner § May be dependent on changes to the National Curriculum – more IT based learning, greater H&S risk – LEA § Providing correct furniture – potentially ICT Partner (through building contractor)	Medium	Medium		w			ICT Project Manager

Building Schools
for the Future

Section 10
Assumptions Underpinning the OBC

10. Assumptions Underpinning the Options Appraisal

The funding analysis underpinning the ICT Options Appraisal will have to be based on a number of assumptions in order to complete the task. These assumptions are listed in the BSF ICT Cost Model – All Haringey Schools OBC spreadsheet and will have to be well managed if the Options detailed and appraised below are to remain realistic and achievable. This will be managed by the ICT Project Manager in consultation with the SMB ICT Working Group.

These assumptions are split into two groups. The first assumptions are based on projected pupil numbers from the most recent PfS FAM spreadsheet and therefore affect funding. The second group are based on calculation assumptions which underpin the spreadsheet model and therefore affect the accuracy. All these assumptions are clearly described in the spreadsheet model and can be challenged and changed within the model where required.

The assumptions based on projected pupil numbers are listed here;

1. All student rolls are taken from the FAM 100106 proposed pupils spreadsheet from PfS

2. All SEN and specialist pupil rolls are included within the number for each inclusive school site

3. The new 6FC is not listed above as this site is delivered differently and will be managed by Darren Saunders

4. William C Harvey + Moselle are included with White Hart Lane

5. Blanche Neville is included with Fortismere

6. Vale is included with Northumberland Park Community School

7. Alexandra Park SEN pupils is included with Alexandra Park

8. The 60 SEN pupils of Gladesmore, PVA + Highgate are assumed to be 20:20:20

9. The PSC is assumed to combine PSC1& PSC2 from FAM = 80

10. Gladesmore and Highgate VI (from FAM) is assumed to be equally split

11. The SRP is assumed to be at the new school

The FAM spreadsheet mentioned above is shown below for quick reference;

Alexandra Park	1380
Fortismere	1615
Gladesmore	1080
Highgate Wood	1415
Hornsey School for Girls	1415
John Loughborough	270
New School at 8 form entry	1200
Northumberland Park	1080
Park View Academy	1080
St Thomas More	1140
White Hart Lane	1080
6 Form Centre	1200
PSU1	40
PSU2	40
Moselle	60
Harvey	60

Vale	50
Blanche Neville	50
Alexandra Park	25
SRP	25
Gladesmore, PV, Highgate	60
Gladesmore Highgate VI	24

The assumptions based on the calculations underpinning the model are listed here;

12. Funding has been entirely delegated to schools on a per pupil number basis using future CAPEX roll numbers from the latest PfS spreadsheet

13. £150 pp has been assumed to the Building Contractor for cabling needs

14. Therefore £75 pp has been added to each school BSF contribution pp numbers

15. 6FC Building Contractor is assumed to be different to the main Contractor (ICTP the same)

16. Sustainability modelling assumes the same Managed Services Costs for a 10 year period

17. Managed Service Costs are based on Newcastle data which may have inaccuracies

18. Capital Infrastructure is assumed a flat 4 year full replacement independent of device

19. Repeated future Infrastructure needs are assumed to be at the current averaged annualised amounts

20. The audit data collected by schools and officers is assumed to be similar to that collected by the ICT Partner when they are in place

21. The Infrastructure costs are based on the data and assumptions used by Newcastle LA which may have inaccuracies

22. Desktops and Laptops have been assumed to be in equal ratio spread 50:50 unless otherwise stated

23. PDAs for learners or teachers have not been assumed until discussion with the school

24. Laptop trollies are assumed to be per every 30 pupil laptops

25. Peripherals are assumed to be at least the current rate or increased by up to 100% if considered low

26. Network hardware is assumed to be at least the current rate in place

27. Network hardware is assumed to not be perishable over a 10 year period

28. Interactive Hardware is assumed to be per teaching space unless advised current hardware is sufficient and VC is in 50% of teaching space

29. Operating System licences are assumed to be included and linked to the hardware item and thus replaced with it

30. On-going ICT costs such as subscriptions to educational software is assumed to be £10 per user per year

31. On-going ICT innovations such as subscriptions to educational software is assumed to be £5 per user per year

32. Staff training is assumed at £50 per user per year for 2 days which is the same ballpark as Newcastle

33. Project Management days required is 1 person for 3 years for the whole estate = 1000 days

34. These 1000 days are allocated on a pupil roll basis

35. Whiteboards are assumed to take half a day

36. Network installation is (Servers + switches)/5 + Wireless / 10

37. Infrastructure costs have been estimated per item in Costed Infra sheet and can be changed

38. The Managed Service Charge is the same as Newcastle, ie. £882,846 + £575,011

39. The Managed Service Charge is shared equitably according to pupil numbers

40. The total Managed Service cost (based on Newcastle data) is assumed to cover a 5 year period

41. A Managed Service Charge of approx £1.5m is assumed to cover a standard team of local ICT technical support staff

42. MIS Managed Support was not in Newcastle's data but is assumed at £10 per user over the period

43. The extra local ICT Champion could be provided by the ICT Partner to move, configure, advise and proactively support the local use of ICT

44. MIS Champion for all schools is calculated at £10.00 per pupil to provide MIS expertise. Assumption based upon£40k per annum per MIS Guru to be shared across 12 schools. Current assumption means £131k will provide 3 full time MIS Gurus

45. Local 2nd/3rd Line Technical support provided by Managed Service provider is £25k per annum per person. Assumptioons have been built in to those schools who have stated their possible interest

46. Classroom laser printer based upon assumption of teaching areas and non teaching areas divided by 2

47. Wireless Access points based upon assumption 1 Access device per 2 classrooms

48. PSU calculation based upon assumption that there will be additional allowance of £500 per pupil for SEN

49. 38 65 IWB systems for Gladesmore which is roughly 2/3 of Classrooms with new IWB's

50. Blanche Neville ICT infrastructure has been incorporated within the Fortismere BSF ICT model

51. The economies of scale of BSF ICT favour schools with larger pupil numbers when we split the funds 100% by pupil numbers. A contribution of £230 per pupil is needed to sustain the requirements of the PSC and this will come from the top sliced SEN funding managed by the LA