Appendix C

HARROW SOCIAL SERVICES INFORMATION SYSTEMS STRATEGY

Management Summary

The purpose of this Strategy is to clarify the direction of future developments in the Information Systems required to support delivery of the authority's broad Social Services functions, and to underpin the development and delivery of effective modern services to vulnerable people living within the Borough.

Sections 1, 2, 3 & 4 of the Strategy describe the background, aims and current business context / possible future direction(s), taking account of key national policy drivers and agreed local policy imperatives. These sections also address the structural changes involved in the impending transfer of all existing Social Services functions to the People First Executive Directorate as part of the revised local authority structure under the New Harrow Project, and the emerging shape of new partnership arrangements - especially those involving increased collaboration with local NHS organisations, and the Harrow Primary Care Trust (PCT) in particular. It also refers to and takes account of what is currently understood about the likely shape of future corporate IT strategy, full details of which are still to emerge.

In this context, **Section 5** of the Strategy examines the existing position with regard to ICT, and the identified strengths and weaknesses of current systems.

Section 6 then examines the key requirements for the future, taking account of the considerable uncertainty about the structural arrangements that will apply in the medium term and beyond, and where some of the critical reference points for such a strategy are still under-developed / absent.

Section 7 of the document outlines the core strategic principles which form the underpinnings for the approach proposed, and proposes as key amongst these a commitment that new and revised applications to support business requirements and to enable front-line staff to work effectively will be built around the fundamental concept of a 'layered architecture'. **Section 8** provides outline details of a specific development option now identified as the primary means to progress the strategy.

Section 9 makes reference to other key elements of a complete system - with special reference to how links with finance and personnel systems might be managed; the development of a common desk-top and a clear policy and system for managing future hardware and software up-grades; the outstanding issues with regard to net-working and bringing remaining out-posted establishments 'on-line'.

Section 10 outlines the key aspects of the financial implications of the proposed strategy - identifying known or potentially available funding streams.

Section 11 then goes on to outline the next steps in delivering the strategy, in terms of identifying the preferred development option, which would ideally be managed simultaneously, through a joint IT Strategy Board with the PCT.

The **Appendices** address some of the key risks identified, and provide further details of the various options evaluated in the course of preparing this strategy.

1. Introduction

Harrow Social Services Department (the SSD) has produced this Information Systems Strategy (IS Strategy) in recognition of the need to establish a clear plan for the role of IS developments in helping to modernise the department, to meet national and local targets, and to embrace service integration and partnership-working.

In view of the national and local drivers, this IS Strategy addresses a range of topics:

- The future location of Social Services functions as part of the new People First Executive Directorate, and their delivery within new partnership arrangements with the Harrow PCT;
- The authority's plans for the use of IT (driven by e-government goals and an intention to develop delivery of many direct services on a locality model);
- The NHS plans for delivering a standard IT architecture (based on approved components) through the Strategic Health Authorities;
- The PCT's plans for IT;
- The strategic "principles" for using IT to underpin modernisation and partnership:
- The current IT "building blocks" available to the SSD in terms of proven technologies;
- The need for a proactive Business Lead to drive IT development, in order to capitalise on opportunities and achieve best returns on investment;
- The importance of relating IT to Business Processes, so that new systems actively support new models of working.

2. Aims

This Information Systems Strategy for Harrow Social Services Department (SSD) seeks to ensure provision of key elements of what will be needed to deliver the agreed Business Direction for the Department, in the context of its transition to the new People First Directorate and as part of the emerging structural and service delivery arrangements which together comprise the New Harrow Project.

It aims to identify requirements that will be key to supporting anticipated new models of working - which may well include new structural arrangements, new partnerships, new ways of working, new processes, and new work tools; and to specify the key characteristics of new and revised systems for the electronic capture, storage, retrieval, reporting and dissemination of business and service information. It outlines a proposed development path that will respond to these core business requirements, and yield all those regular outputs required to support efficient and effective management of the service, and to meet external reporting requirements.

It also seeks to ensure:

- the ability to comply with key Government and local policy expectations (particularly in relation to developing services which are much more closely integrated with those of other public service agencies – especially local NHS services);
- the ability to meet key Government expectations in relation to electronic service delivery (the broad 'e-government' agenda) and the development of (integrated) electronic (social care) records (ESCR);

 that information systems to be developed under this strategy comply with all the key national standards for data formulation and exchange, and are able to support delivery of new corporate expectations in relation to the use of ICT

3. Organisational Context

3.a) New Harrow Project & People First Executive Directorate

Recently announced restructuring within the local authority as a whole has resulted in the creation of a new People First Executive Directorate. This will shortly take on responsibility for delivering all social and education services (including library services) to all children and young people and to adults; and will support the planned reconfiguration of many local authority services around an area-based service delivery model. Detailed planning of the new Directorate structure is still taking place and it will be some time before the precise implications and a clear development path / timetable for the new organisation will be made clear.

It is however clear that there will be a management unit providing central support services to the operational service arms of the new directorate - which is likely to include human resources, financial management, ITC services, strategic planning and performance management functions - all inter-facing as appropriate with relevant corporate counterparts within the Organisational Development Directorate.

The precise implications of the new corporate structure in terms of ICT support and core business applications are still to be clarified.

3.b) Social Services Department

Harrow Social Services Department is currently configured with two major Divisions each responsible for management and delivery of operational services to (respectively) all adult care groups, and to vulnerable children and families. The majority of existing central support services are located together with senior operational managers within the Civic Centre complex.

There are three major out-posted office sites where care-management and other professional and support staff are located; a team based at Northwick Park Hospital; and a number of distributed provider service units, including two residential child care units, a Family Centre, and a number of residential and day care units. Not all of the above are as yet fully cabled to provide a robust networked connection to common desktop and Office systems or to core departmental applications.

The intended trajectory of future service developments will be towards further service integration with other key local agencies - especially the Harrow PCT, the North West London Hospital Trust, Central and North West London Mental Health Trust, the Education Department, the Connexions Service, the Police, etc. This may involve co-location of (e.g.) some Health and Social Services staff providing community support to vulnerable older people, and may at some point involve major structural change with the possible establishment of one or more Care Trusts, a Children's Trust, etc.

3.c) Corporate Strategy

Detailed corporate IT strategy is still to be articulated, but there is a clear intention that the new corporate structures will generate a more coherent and unified approach to ICT systems and support. These are likely to include a move towards building single core databases of Harrow citizens and of common address information; the development of customer relationship systems to support a move towards one-stop shops / call centre style public-access points; and a strong emphasis on using web-enabled systems to develop both a strong corporate intranet and a citizen-focussed extranet facility, which will support delivery of the egovernment requirement to facilitate electronic transactions and to make all relevant services accessible on-line.

3.d) Implications

Although much of the detail as to how services will be configured and the organisation itself structured in (say) three years time is not yet clear, there are already key implications for the planning of Social Services systems and applications that can be readily identified. These include, as a minimum:

- Further requirements to interface systems as between different service areas and different organisations, and to create (standardised) electronic records;
- Further requirements to enable direct citizen access to information and to electronically-enabled service processes through e-government developments;
- The need for considerable flexibility in responding to the business requirements
 of existing services, given how little can be predicted about the future shape
 and configuration of those services (and the policy imperatives to which they
 will be required to respond), beyond knowing that further change will be
 substantial and almost certainly on-going.

4. Key Partnerships

As indicated above, the key partnerships for the short and medium-term future (in the context of an evolving 'People First' Directorate) are likely to be:

- for operational services with the PCT & other NHS agencies, and with a wide range of local agencies involved in support to vulnerable children;
- for all sections with other parts of the changing corporate structure: customer relationship systems, other corporate departments and service areas (Supporting People Team, Housing Dept., etc.), corporate personnel and finance systems.

5. Current Position

The SSD's current systems are:

- CARES an Oracle-based client index system with limited assessment / service data developed in-house 12 years ago;
- E-Works system for PDSS (currently in pilot form) a first step to using process management software to create a "front-end" to CARES which supports new models of working, adds functionality, and provides a basis for "bridging" to other systems (system integration);

- JADE a proprietary database technology, currently providing data repository and specialist Mental Health functionality, including common Care Plans and viewing of 'Life Charts'; with the capacity to stream data currently held within otherwise non-compatible legacy systems into a common data format. The first phase joint system between SSD and PCT was implemented in February 2003.
- Children and Families 'Tracker' system MS Access system developed inhouse. This was initially intended as a performance management system for tracking assessment targets, but may be extended to support other operational needs.
- Additional finance modules recently acquired:
 - Home care charging;
 - Residential charging.

These interface to some degree with corporate finance systems but are not fully integrated at an operational level: there is currently no effective means to provide electronically for 'costed packages of care'.

Whilst there is now a generally fairly good level of PC penetration into front-line services, there are known problems with existing systems about data quality and integrity, lack of capacity to capture critical elements of essential service information, major reporting shortfalls, gaps in the networking of out-posted service bases, and problems with regard to user-acceptability and with the amount of programming effort required to keep pace with known current and predictable future requirements.

6. Key Requirements

The Department has identified its range of key requirements, which may be conveniently grouped as follows:

6(a) Core client-focussed and service-management applications which support the professional work of the Department and provide a means to electronically record, process and exchange key client-based records and registers, and which can provide the basis for electronic social care records. These applications provide a means to record referrals and their disposal; to record assessments and reviews (and their outcomes); to record and display Care Plans and subsequent changes to them; to electronically order services. They (or other integrated systems) also need to track service activity and related expenditure commitments; to provide the basis for invoice checking; and to interface with main financial systems for processing payments, complete financial assessments and manage billing to service-users in relation to service charges, etc.

Many of these functions / personal data will need to be made accessible (subject to agreed data-sharing protocols - and in accordance with Data Protection Act and Caldicott Guardian requirements) to professional staff working within other agencies – e.g. GPs, District Nurses, etc., or to support cross-agency decision-making and related administration, e.g. management of the 'continuing care' arrangements between the SSD and Harrow PCT.

This range of functionality is also required to ensure the generation of all the ongoing service and activity information required to efficiently manage the service, and to complete internal performance management processes.

It must also feed into budget monitoring processes and the generation of unit-costs; support future service planning and development; generate formal data returns required by the Department of Health (DOH), the Office of the Deputy Prime Minister (OPDM) or other Government agencies; and to produce the annual out-turn Performance Assessment Framework (PAF) and Best Value Performance Indicators (including 'in-year' monitoring); etc.

To the limited extent that this range of functionality is currently available at all, this is currently held within the Oracle-based CARES system which provides the primary client index and service information database. In order to meet many of its identified shortfalls, this system is currently augmented by a plethora of non-integrated spreadsheet and small database applications developed and used locally.

It is to redressing the limitations of these core service information systems that much of this strategy is primarily addressed.

- 6(b) Access to the corporate Intranet and external Internet applications in order to help meet e-government requirements, as (e.g.) a means for Harrow citizens, other professionals and members of the public to remotely access standard information about services and how to access them; to make referrals or submit requests for information; or to conduct other electronic transactions pay bills for service charges, communicate with their allocated contact worker / team, access elements of their social care record, etc.
- 6(c) Access to standard electronic office facilities for all professional and administrative support staff, including those in out-posted office and direct service provision bases. These are required to provide common basic desktop systems offering word processing and document production, distributed printing, e-mail and electronic diary, Intranet / Internet webbrowsing facilities, and some spreadsheet / small database systems; all across a common network system.
 - These are currently provided by a mix of MS 'Windows'-based desktop machines running MS Office applications, and some 'dumb' desktop terminals accessing applications through a networked Citrix server system.
- 6(d) Small specialist applications used by specific 'back-office' staff, especially those providing finance and personnel functions (including interface with / access to corporate systems), but also including those with other specialist roles e.g. stock control in equipment stores, etc.
 - These are currently provided by a mix of 'bought-in' and bespoke applications, many of which have limited functionality and / or which do not interface adequately with other systems holding related information.
- 6(e) To interface with emerging corporate systems especially those being developed in order to support 'one-stop' shops / customer relationship functions (a common 'people' database, involving use of a common unique person ID system); or based upon the Local Land and Property Gazetteer (LLPG) (in order to provide a uniform approach to recording and accessing all address information, in accordance with BS7666), and which will also support the use of GIS-based data mapping and analysis tools.

- 6(f) To comply with all relevant national and local standards, which include:
 - Data systems to be consistent with all current 'meta-data' standards and to take account of DOH minimum data sets for adults and for children, with reports matched to the specification of all relevant PAF and BV PIs, and other DOH data reporting requirements;
 - Maintenance of unique client IDs may involve preserving existing CARES ID and / or switching to another system of unique IDs, but may also include reference / mapping to NHS numbers and / or DES Unique Pupil numbers;
 - Address information to be stored in a format compliant with Harrow LLPG expectations and with the requirements of BS 7666;
 - Systems to take account of emerging standards for 'e-procurement' especially in relation to electronic ordering of care-management services;
 - Data formatting and exchange protocols to be compliant with all e-GIF v.5 standards;
 - All 'public-facing' electronic information and transactions through an
 external internet process consistent with at least all current APLAWS
 requirements, and capable of supporting all relevant formats for web
 access including digital TV systems, phone and voice-activated
 operation. Here the assumption is that the specification of corporate
 extranet requirements will provide the means of ensuring this kind of
 compliance, and will ensure consistency with corporate 'channel
 strategy' as this is developed;
 - All networked applications to be compliant with NHSnet security requirements and with the use of Citrix server technology, capable of interfacing with standard MS Office applications (especially MS Word templates for electronic forms and form letters), and with embedded use of the Novell Groupwise e-mail system;
 - Applications to be capable of supporting remote working, and various forms of mobile computing – including possible use of PDAs, and / or other hand-held computing devices;
 - Systems to be developed will the authority's response to the current
 e-government targets: all appropriate transactions to be e-enabled by
 December 2005. In order to meet this requirement, the Department will
 be undertaking a process of identifying and classifying all key
 transactions and processes to ensure that all that are appropriate are
 implemented electronically. These systems will also enable us to meet
 DOH targets to have developed electronic social care records by 2004

7. Strategic Principles

In order to provide a sound basis for future IT investment, the following principles have been agreed:

- IT development will be 'business-led'. The SSD IT Strategy Group will be chaired by a senior operational manager who will satisfy themselves that:
 - the right investments are being made;
 - o that projects are managed to time and budget.
- The connections between business direction, business processes and systems
 will be made explicit in each proposed development. This means that there will
 be a clear view of business change (and its impact) and that this will be
 reflected in a review of the business processes before systems are initiated.

Hence systems will clearly match future needs rather than simply addressing current deficits.

- 'Systems' are primarily tools to support operational staff in carrying out core
 work more efficiently and effectively. In well-designed operational systems, the
 processes used to generate required management information are undertaken
 largely 'in the background', and should require little additional direct inputting by
 front-end users beyond those required for core data-recording purposes.
- As operational tools, systems must be used by the people "doing the work" it
 is no longer appropriate for staff to record on paper and then pass this to
 administration staff to key-in "because this is not part of my job". Recording is a
 key part of the professional task, and the recording medium of the future will be
 electronic systems which facilitate the (dynamic) sharing of electronic records.
- Such systems will be "user friendly" in that they will:
 - o have a modern, easy-to-use and consistent style of working;
 - be easily re-configurable under user control (i.e. with only limited recourse to central programming or systems administration functions).
- A key aspect of all systems will be connectivity:
 - to support various emerging standards for shared electronic records (ICRS, EHR, EPR, ESCR, ECR);
 - o to facilitate access by the public, clients / carers, partners;
 - o with suitable controls for maintaining protocols and Caldicott standards;
 - with appropriate security.
- The SSD will seek to move actively to redress the perceived gaps in system support. Wherever possible, this will be via partnership projects:
 - to defray cost;
 - to seek mutual benefits in models of working and system support which will strengthen the partnership;
 - these projects may be small / incremental but must make a demonstrable contribution to the "bigger picture" (e.g. furtherance of connectivity).
- Where the future is uncertain (e.g. emerging IT strategy from Strategic Health Authorities), the SSD will establish broad directions and ensure that progress continues within a risk-managed strategy.
- Intended IT developments will be published and updated so that staff know what to expect and can provide input.
- In order to ensure future IT investments are cost-effective, the SSD will adopt an approach which relies upon use of a 'layered architecture'.

This approach provides that elements of (person and service) data are held (in a 'data repository') separately from the front-end ('work-flow') applications which provide the key operational functionality. The latter are used to draw in and present that data to the user, enable them to manipulate it (through a defined business process) and then re-store it - all under a consistent user-friendly front-end interface and without the need to inter-act directly with the underlying database. Moreover, that front-end functionality can then be re-designed and re-programmed relatively quickly / cheaply as and when future requirements change, as they surely will. Most future re-design work can be done without the need to completely re-organise the underlying data structures or major 'external programming' effort, as is needed where the data itself and the functionality that deploys it are held within the same application - (e.g.) in the current CARES system. This common 'front-end' will need the capability to support seamless access to and processing of screens produced by specialist legacy systems, where it is more efficient to retain that functionality there.

The strategy therefore proposes that all future core service management applications will be built <u>only</u> using this approach and from agreed common 'building-blocks', unless there is an overwhelming business case to take a different approach. These 'building-blocks' can be provided by using what works best within the systems currently being developed / trialled in various parts of the Department and in which considerable investment has already been made, namely:

- Using the core of the current JADE mental health system as a shared data repository and as a means of providing cross-agency and cross-authority inter-operability, giving shared access to commonly-held data about common clients, whatever the 'primary care group' involved;
- Using a 'work-flow' product (possibly Metastorm 'e-Works', as used within the current PDSS pilot application) as a means to provide a flexible and responsive front-end to core applications, which are in turn built up from a detailed analysis and stream-lining of the business processes required to deliver efficient front-line service responses;
- Retaining, for at least the time-being, some components of the current Oracle-based CARES system as the primary client index system and 'back-end' database (together with legacy systems used by other agencies) which are then enabled to pass legacy data through to the extended JADE system (the data repository), as and when required;
- Surrounding each of these applications with agreed data-sharing protocols which are consistent with Data Protection Act and Caldicott Guardian requirements, and with appropriate network security layers including those already in place inherently through our access to the NHSNet;
- Ensuring that we no longer invest in 'off the shelf' applications that do not provide a means to interface with other key systems, or which do not allow for the kind of inter-operability that our known business requirements will demand;

This approach is consistent with what can already be discerned / stated about the anticipated future direction of corporate systems, and is capable of being linked with those common corporate databases likely to be developed and which will eventually hold common person and address data as part of an authority-wide customer-relations system.

This approach is also consistent with enabling us to meet all the currently identified key standards governing inter-operability and supporting egovernment requirements.

Further detailed consideration will be given as to how best to take forward the development of the specialist applications required to support delivery of services for Children and Families. This will include preferred ways of consolidating the positive gains already achieved through the introduction of the MS Access-based 'Tracker' system, and the future delivery of the Government's guidance for providing Identification, Referral and Tracking (IRT) systems in ways that support data exchanges on a cross-authority (? Pan-London ?) basis.

8. Development Options

A number of possible development options have been identified and their viability / priority evaluated (please refer to Appendix 2 for further details). As a result of these considerations, an outline proposal has been agreed to further test the viability of the broad approach outlined in this strategy, by development of a further pilot application working across the social care and community health boundary, and based around (say) one local GP practice.

This project will aim to provide a means of linking key elements of adult care management services with relevant NHS services - GP practices, community health services, hospital systems in order to deliver a system that will support delivery of an agreed model for the 'Single Assessment Process' (SAP) for older people, initially on a pilot basis. Please refer to Appendix 2 for further details and an outline of the proposed process / indicative costing involved.

This would itself depend upon extending the existing PDSS pilot work-flow system, and is therefore subject to making an early evaluation of that system, once fully implemented. Such an expansion is required both to extend the functionality so as to cover all key aspects of the care management process (including 'costed packages of care', and arrangements for the 'micro-commissioning' of agreed services); but also in terms of its roll-out to a wider group of care management staff.

The key aspect of this development option is that it provides an appropriate response to identified high-priority business requirements, using applications in which we have already invested to a substantial degree. At the same time, it will serve to advance the kind of layered architecture outlined above, securing valuable experience and generating further organisational learning and expertise in developments managed on this basis.

9. Other systems

9(a) Finance System

The authority is in the process of upgrading to the Cedar e-financials system. This route is also being considered for the creditor system.

It is essential that the core service-management systems used in the Social Services Department are able to interface with these systems, so as to provide managers with timely information to facilitate effective budget management.

A robust means for commitment accounting is critical to Social Services in relation to its financial management functions.

9(b) Personnel System

It is understood that consideration is being given to replacement of the present Oracle MR system with one provided by Midland Software. This new product contains additional modules not currently available in Oracle and has the additional strength of using a common database for both salaries and personnel functions.

Social Services would seek to have 'view-only' access as appropriate for its managers. From the Social Services perspective, it is important that there is close linkage between these systems.

9(c) Common Desktop

In Social Services, provision of access to the network and beyond is provided through the use of Citrix Technology. A number of profiles have been defined to cater for the needs of different users. As the individual user does not have the ability to change this, a high level of control is available combined with ease of upgrade and support.

Social Services will otherwise align with any Common Desktop agreed through the corporate process.

9(d) Maintenance and Upgrade Policy

As part of the new corporate policy, the Harrow Information Technology Service (HITS) is moving towards a customer-centred focus. The state of equipment and levels of software within the department and across the authority vary widely.

Social Services Department has recently made considerable investment in Citrix based technology, servers and workstations.

It is essential that an adequately funded corporate policy be developed, in which Social Services Department will be eager to participate. As a Department, we will also need to establish an agreed internal mechanism to evaluate and monitor bids for new, up-graded, and replacement hardware or to invest in new software applications for specific purposes.

9(e) NHSNet

The authority has now obtained full code connectivity for its network to the NHSnet, and this will provide opportunities for good connectivity for out-posted teams. Social Services and Health staff who are co-located will be able to access their own and each others' systems without the need for both organisations to separately network each location.

Although this will involve some additional costs for security purposes, the overall reduction in equipment and networking costs will still be significant. It is not possible to attribute a figure for this at present.

Provision has been made for connection of out-lying units to the council's network from the corporate budget, together with some funds provided through Information for Social Care (IFSC) Special Grant. Through the use of Citrix, this will ensure that the Department will meet and exceed the target levels for internet access, etc., required by IFSC.

9(f) Other Issues

In order to meet the current business requirements of the Children and Families division in a timely manner, it has been necessary to develop a number of management information systems using MS Access databases.

Access in itself is not designed as a multi-user database, and consideration should be given to moving future development onto a more robust platform.

Work undertaken on these systems to date will inform the specification of future developments as well as provide good sources of data. The systems, if still in use, will also require modification so as to meet the range of e-government requirements.

10. Funding Implications and Time-Scale

It has not been possible to identify detailed estimated costs prior to seeking agreement on the broad route forward, and this will also require further discussion with the PCT. However some outline estimates are provided within the detailed proposal in relation to the preferred Development Option - please see Appendix 2.

The authority is currently bidding for 'Igol on-line' special funding from (OPDM) and if successful, a portion of this may be appropriately used to support some of the developments identified in this strategy.

If JADE were chosen as a main development partner, this would enable speedier delivery as we have already undertaken an OJEC procurement process to secure their work on the ISB project.

E-Works (work-flow software), who have been central to the PDSS pilot, have been asked to provide 'proof of concept' of the ability to interface effectively with the JADE system. They have also offered licensing arrangements for a Borough-wide license, which would produce considerable savings as against the cost of licensing individual users.

Staffing resources will need to be considered when the eventual design is confirmed. There are likely to be significant costs in data clearing, prior to migration to new systems. Expenditure on interim solutions for both Adults and Children and Families will reduce the available resource. Otherwise, costs will fall primarily on additional or replacement (larger) servers, as the network is largely deployed through our own networks and the NHSnet.

At this stage, it is anticipated that the further development work outlined above would proceed over approximately the next two-year period, although this estimate is provisional and subject to variation depending upon completion of the detailed scoping and project-planning work required as a first step.

Summary of major current and projected funding streams, estimated costs of implementing agreed development path, possible funding bids, etc:

Funding	2003 / 04	2004 / 05		
	£	£		
SSD Base Budget: *	100,000	100,000		
IFSC Special Grant	184,000	125,000		
Ear-marked 1-off extra revenue:	150,000	NIL		
Current external funding bids:	NO FIGURES	YET AVAILABLE		
* Otherwise uncommitted as of now - excludes salaries and other prior commitments				

11. Next Steps

- 11.1 Secure broader sign-up to this strategy from People First (Education workstream) colleagues, other key corporate fora and from elected Members, as necessary. Communicate key points of the strategy across relevant parts of the authority and with the PCT.
- 11.2 Establish Joint IT Strategy Board with PCT, agree constitution and formal terms of agreement and invite participation by Education Department colleague(s). Secure sign-up by JADE as full partners (and possibly also of work-flow preferred provider). Some informal discussions with the PCT are already under way.
- 11.3 Undertake 'site-visits' to other local authorities using / developing e-Works work-flow solutions, especially those with specific health and social care applicability.
- 11.4 Complete roll-out of PDSS pilot, and set criteria, processes and time-scale for formal evaluation exercise.
- 11.5 Explore potential for early roll-out of existing PDSS pilot work-flow application to Older People's Care-Management Team(s).
- 11.6 Need to identify and secure professional support and commitment to a core set of common business processes which encapsulate the essence of the care-management task-set, but which allow some room for minimal specialist care-group requirements.
- 11.7 Scope outline set of requirements for proposed SAP Development Option in more detail: especially in relation to providing additional functionality of current PDSS pilot, and links with Finance systems / processes. Identify robust estimates of costs and time-scale.
- 11.8 Prepare detailed business case to elected Members, in order to release additional ear-marked corporate funding.
- 11.9 Consider the scope and focus of any required procurement process in relation to acquisition of a preferred work-flow product or of an appropriately experienced development partner, should commitment to the further use of e-Works be agreed without a separate procurement exercise.
- 11.10 Agree the next steps in (and an appropriate platform for) re-providing and extending the functionality of the Children and Families 'Tracker' application.
- 11.11 Develop an agreed approach to project-managing delivery of the proposed Development Project.
- 11.12 Identify all public-facing services and processes which can be viably provided as electronic transactions through the corporate extranet, and scope a development path towards enabling this to happen.

APPENDICES

List of appendices

- 1. Risk Management
- 2. Preferred Development Option
- 3. Options considered during preparation of the strategy:
 - 3.1 Possible Business Options
 - 3.2 Possible Business Directions and Responses
 - 3.3 Possible Development Projects

Appendix 1: Risk Management

The following risk areas have been identified:

- Future location of the existing JADE server may become an issue when / if further development and extended use of the application requires a means of supporting it across broader networks and possibly over more extended timeframes / outside 'standard' working hours.
- Proposed developments may be jeopardised by lack of capacity by all or any
 of the key partners being unable to make the necessary financial
 commitments, and / or by the impact of proposed national procurement
 initiatives by the NHS Executive.
- Proposed layered architecture solution may be jeopardised by contraindications from evaluation of the PDSS work-flow pilot.
- Emerging corporate strategy may lead to other non-compatible solutions being identified for key corporate applications.
- Ensuring capacity within the Department to manage a complex and sustained change-management process, involving relatively sophisticated projectmanagement requirements. Ensuring capacity to resource an appropriately skilled project team with adequate local knowledge and credibility.

Appendix 2: Preferred Development Option

Plan for Harrow SSD/PCT: Project for Single Assessment Process

Outline Requirements:

All parties to the single assessment process (SAP) need to be able to see the client record and record their own involvement with the client in the form of assessment events and services being provided. This will enable a more co-ordinated approach to providing services and prevent the client having to answer the same questions over and over. It will also prevent duplication of assessment effort and enable agencies to make better decisions about their own role, based on seeing what others are doing. There is a further opportunity to streamline the process by enabling staff operating under joint protocols to call off agreed services, using electronic ordering. At the moment, links should be provided between SSD, GPs and community health; in future, these should include hospital, housing.

The scenarios to be supported might include:

- SSD assessor completes contact and overview assessment and requests (electronically?) a specialist assessment from the community nurse
- A district nurse visiting an older person notes that they need help with bathing and submits her assessment to the SSD team, who prepare a care plan (without repeating the assessment)
- A GP views the care package already being provided to a patient and calls-off an extra 2 hours for the following few days to support the patient whilst their carer has flu

The functionality required includes:

- Record a contact assessment. This is already in PDSS pilot
- Provide for other levels of assessment under SAP (overview, specialist, comprehensive). PDSS pilot currently supports printing of an assessment form, with data then loaded to CARES. Decision needs to be made on whether to:
 - o add other paper forms for other levels of assessment
 - o incorporate the Easycare "package" (paper or electronic format)
 - o scan paper forms (and hold in e-works folder for viewing by others)
 - load data to CARES (the update path from CARES to JADE already exists but would need to be extended for assessment data)
- Create a care plan which shows a decision to provide a service(s). This is already in PDSS pilot but needs to be extended to show the full range of services which may be provided from SSD, community health (and specialist services like intermediate care, or preventive services potentially available from GP surgeries?). Decision needs to be made whether to:
 - Provide standard costs against services on the care package for early warning of budget position OR
 - create a service directory, linking service types to providers and their "usual" costs for more accurate budget position OR
 - provide for costs to be picked up during contracting through corporate Financials and fed back into the budgeting system (will this cause unacceptable delays in knowing the budget position) OR
 - design (even at this stage) the finance links for commitment accounting within the SSD system (spot purchases to have the negotiated costs input, but block purchases to link to contracts for cost/volume information)

- Pass the care plan for authorisation. PDSS pilot does this but needs to incorporate (at this point or earlier, during preparation of the care plan?) the likely costs against current commitments
- Pass the authorised plan to contracts (new process for managing block purchases)
- Order the service and manage changes (suspension, increase, decrease and cessation of service) – do this electronically for key providers and reflect the changes into the SSD budget system and corporate financials
- Record reviews scheduled and unscheduled (currently supported by PDSS pilot)
- Manage interface to corporate purchasing system, including multiple funding streams (SP, ILF, pooled budgets etc)
- Flexible reporting (e.g. numbers processed, time targets met, profiles of need, costs, use of providers). This is provided by e-works

Assumptions:

- Analyst (A) and technical (T) resource costed at 36K pa each
- Staff time for participation not costed in
- Costs for terminal/network upgrades necessary to access browser interface not included
- Licenses for e-works not included (assumed to be covered by enterprise agreement)
 - Licensing implications of a wider user-base accessing JADE as a repository to be identified (rather than accessing the JADE application)
- Pilot planned for milestones B, C and D this extends elapsed time
- CARES database will be retained (though functions/interface to be replaced by e-works). This fits the current approach, whereby CARES is the master database for the SSD and data is copied to JADE

Milestone / time-scale	Tasks		Comment	Cost
A: PDSS ready for wider use and client records loaded	1.	Agree protocols between agencies for sharing information,	Need to demo the PDSS pilot with data/scenarios which OP/GP/community	A + T for 2 weeks £3,000
Will take: Team of 4 (2 analysts, 2 technical) 6 months elapsed		accessing services	health can relate to (and probably a simplified version). Agree what should happen on a variety of scenarios	
	2.	Adapt PDSS pilot to use chosen (shared) assessment form instead of current form (this may be by	Modularise PDSS pilot and design which bits will be used by which agency (route mapping).	A + T for 2 weeks £3,000
	Sa	interfacing to Easycare). Write results to CARES (or direct to JADE?).	Test ability to call Easycare as the assessment module and show to agencies. Agree use of Easycare (depends on price?) or other assessment	A + 2T for 4 weeks £4500
	36	SNOTE 1,2	screens/paper versions Design update from	A + 2T for
			CARES to repository. Who will write the updates to JADE?	4 weeks £4500

Milestone / time-scale	Tasks		Comment	Cost
	3.	Load OP client records to CARES and provide routines for maintaining copying to JADE (note this will mean cross-checking social care and health records, as was done for MH)	Can the cross-checking be helped by running matching programmes and distributing the exception lists to teams to check? This could reduce the estimate/cost significantly (need to ask MH about "lessons learned")	2A + 2T for 8 weeks £24,000
Milestone A total		,		£39,000
B: Assessment available to health/SSD Will take: Team of 4 (2 analysts, 2 technical) 9 months elapsed	4.	Upgrade PDSS to work in the health environment (check how messages will be sent/received) and make it available through browser interface to GPs,	Ensure equipment in health can receive browser interface (assume some terminal/ network upgrades will be needed). EMIS has an interface for accessing e-work forms – need to check Torex.	A + T for 4 weeks £6000
		community health and hospital. PDSS pilot already shown to work through standard web browser so no development work needed	Decide what community health will do when IPCIS is switched off – can they use a version of the PDSS pilot to manage their own referrals/assessments? Will this need to be via a booking system? (to offer choices of dates, as mandated by NHS). There is a booking system integrated with e-works which might be used.	Cost not estimated
			Pilot adapted PDSS pilot + assessment interface (Easycare?) in one GP surgery, SSD office and clinic. Review results	2A + 2T for 10 weeks £30,000 + training support
			Review and make any necessary changes. Roll out to all	2A + 2T for 6 weeks £18,000
Milestone B total				£54,000
C: Care packages available to health/SSD Will take: Team of 4 (2 analysts, 2 technical) 8 months elapsed	5.	Extend care packages in PDSS pilot to cover full range of services provided through GP, community health and SSD (see options but will probably involve creating a service directory)	Includes design for holding data in CARES and updating repository (service directory/ care packages). Who will write the updates to JADE? The SSD is intending for social care staff to enter required services and contracts staff to allocate to contracts (requires workflow to route transactions and reflect decisions back).	A + 2T for 8 weeks £18,000

Milestone / time-scale	Tasks		Comment	Cost
	6.	full assessment/ care package software available to GPs, community health and SSD. Enable client views from hospital	Pilot extension of care packages with one GP surgery, SSD office and clinic. Review results Review and make any necessary changes. Roll out to all. Provide views of assessment and care package to hospital	A + T for 10 weeks £15,000 + training support 2A + 2T for 6 weeks £18,000 A + T for 3 weeks £4,500
Milestone C total				£55,500
D: Extend finance functionality Will take: Team of 4 (2 analysts, 2 technical) 6 months elapsed		Design commitment accounting (will need access to contracts, prices and GL codes)	There are a number of options (see "functionality" section at beginning of this plan). Principles need to be agreed at the point when the care packages are designed (see task 5 above). Task 7 deals primarily with deciding required reporting (e.g. by service type, provider) for task 8. Will need input from finance and operational managers	A + T for 8 weeks £12,000
	8.	Build the commitment accounting to accumulate planned costs. Show this as raw data (e.g. we have spent £x on respite care and £y with supplier A) and also accumulated by budget head (e.g. we have spent £z on children with disabilities, 10% of the packages for OP use SP funding)	Needs to be as flexible as possible to accommodate future changes in services, funding streams, GL codes etc with minimum effort. What financial reporting will the PCT want now/in the future?	2A + 2T for 12 weeks £36,000
		Pilot electronic ordering: capture transactions in a file to be a) authorised at appropriate level and b corporate purchasing system. Initially, this could involve purchase of services to prevent hospital admission / facilitate discharge	Take transactions from service package and decide how to get them to providers (e.g. through corporate purchasing system). Also need confirmation of order acceptance and of start of service. Also ways to process amendments to service and reporting of actual service provided. Pilot one provider/service type	

Milestone / time-scale	Tasks	Comment	Cost
	10. Decide on extent of electronic ordering to be implemented: Major contracts for SSD only (e.g. domiciliary care) Use by PCT/Trust under pooled budgets (e.g. to facilitate discharge) Working towards ALL services	To be discussed further once feasibility has been demonstrated via pilot. Also needs to take account of pressure to introduce under e-government.	N/A
Milestone D total			£66,000
GRAND TOTAL			£214,500

NOTE 1: access by field staff needs to be considered. Currently, they use paper assessment forms because they have no mobile computing support. Need to decide whether to support a paper-based process (e.g. by scanning forms in at points in the community e.g. libraries) or whether to introduce mobile computing (for instance Cambridge SSD have demonstrated Easycare with PDAs and laptops)

NOTE 2: Will need to decide who does the work (Harrow should consider developing in-house expertise in workflow)

3.1 Possible Business Options

Until recently, there has been no explicit way to recognise the relationship between business strategy, business processes and IT support. In the preparation of this IS Strategy, various business options have been discussed (table 1).

Table 1 - Possible Business Options

Business Option	Likelihood	Business/system Implications
Central or locality-based LA call centre or one-stop shop	M – but not for 2-3 years?	This would involve the SSD developing a "pull through" process to take contacts passed on, but the SSD would be able to "lose" the general queries it currently deals with
SSD call centre or one-stop shop	M – good way to prepare for LA call centre?	This would involve specially trained staff taking all contacts and progressing to an agreed "cut off point" before passing through to teams. The cut-off point could be extended if there was an Access team which handled all cases until the 6-week review
SSD working with NHS Direct, who would provide the first stage of a joint call centre	L?	This may be mandated if the government pursues the option of "Care Direct" (currently being piloted in SW England)
Redefinition of roles within a team (review of staff mix)	Н	Social workers to focus on assessment and care management, with customer service officers taking contacts (this has been done in PDSS and is being considered for OP)
Self assessment	М	This would involve potential clients working through a (simple) form to establish their needs and eligibility (possibly via the website or call centre/one-stop shop)
Jointly managed clients	Н	This requires multidisciplinary teams – whose members may still be employed separately by health or the SSD – to share client systems.
		MH and LD are now multidisciplinary teams and MH has a new joint system (JADE) but LD are still using separate systems.
		The creation of joint OP teams is under discussion and this would facilitate the Single Assessment Process, but there are currently no shared systems between the SSD, GPs and community health staff
Specialist joint teams for supporting care pathways	Н	There is a hospital team working on preventing admissions/facilitating discharges and the SSD/PCT are also looking at the requirements for intermediate care. There are currently no shared systems between the Trust and SSD.
		Equipment services must be integrated by 2005 and there are options to create specialist teams involving nurses / OT / physios (e.g. "off the legs" service, peripatetic diabetes and/or respiratory teams)

Business Option	Likelihood	Business/system Implications
SAP extended to allowing range of professionals to commission each others' services (with or without pooled budgets)	M	Streamlining both assessment and commissioning is part of the aim of e-government (e.g. B2B processes)

3.2 Possible Business Directions and Responses

A number of possible business directions and responses have been identified (table 2):

Table 2 – Possible business directions and responses

Business Direction	Option Option	Implications	Rating (based on risk/benefit)
Wait for LA to	Offer to "go first". Prepare by developing a SSD call centre approach	Would put IT plans largely on "hold" (though could proceed with workflow	М
proceed with corporate business plans			Risk – of long delays and change of plans
(New Harrow)		front-end to CARES)	Benefit – active part in LA future + funding
	Wait for bedding down of	As above. Primary	М
	People First	development partner in this case would be education	Risk – delays, and education may not be best primary partner
			Benefit – lack of risk?
"Go it alone"	Seek funding opportunity tied to SSD challenges (SAP, Climbié, delayed discharge)	Use to develop new	L
		models of working, underpinned by workflow	Risk – SSD too small to sustain degree of IT development needed on its own?
			Benefit – able to "get house in order" – particularly concentrate on better operational finance?
Partner with	Agree joint IT board and funding. Develop a series of incremental projects using JADE as repository and workflow as "glue" to develop connectivity	Suits both	Н
PCT		organisations and fits government agenda	Risk – imbalance of power, different priorities
			Benefit – connecting GPs, community health etc will greatly enhance joint working

Partnering with the PCT to undertake a series of incremental projects (using JADE and workflow) is the chosen direction.

3.3 Possible Development Projects

The following possible development projects have been identified and considered (table 3):

Table 3 – Possible Development Projects

Project	Implications	Benefits	Rating
SAP project to link GP, community health, hospital, SSD	Need to match 8000+ clients across health/SSD. Agree data set on JADE. Extend PDSS to act as common interface. Connect community, GP and hospital to JADE	Common SAP process (supported across organisational boundaries) AND progresses architecture plans	Н
C & F project	Funding for IRT exists. Use to port Tracker and planned development to workflow/JADE environment AND connect in community health, education. Include shared CPR	Safer children (and achieves the migration of Tracker to standard infrastructure) AND progresses architecture plans	Н
SSD finance	Extend PDSS pilot to address service directory, costed packages of care, commitment accounting, accounting from different funding streams (e.g. SP)	Vital for budget management but does not advance architecture plans	Н
Mobile computing	Use handheld for capturing assessment data in field. Dock at points in community (e.g. library)	Important for supporting field staff but does not advance architecture plans	М
Networking of finance / HR systems	Provide connection to all team/unit managers and train to manage key tasks (e.g. absence, agency staff)	Important for more business-like management but does not advance architecture plans	L