Trust Board is requested to note and advise on the approach

1. The national programme for IT (NPfIT) forms a major part of the deliverables for the Trusts IM&T strategy

2. The focus areas for the strategy are outlined as Patients, Referrers, Clinical, Administration, Transactional, Performance

3. The local work programme addresses gaps, risks and business need in the focus areas

4. To approve the indicative investment required to deliver the strategy for 2007/08-2010/11

5. To approve how the IM&T strategy supports the 2020 Vision for 2007/08-2010/11.

6. To approve the investment in one session of consultant time to lead on IM&T for the Trust (including NPfIT)

7. To note the risk and proposed actions against the high priorities listed

2020 vision and the move to focus on a tertiary centre are key drivers for the strategy.

The contestable market provides an opportunity to exploit technology advances and invest to improve efficiency and gain competitive edge. As an organization we wish to be more flexible, less bureaucratic and faster at delivery of an excellent service. The IM&T investments will be tested to support these objectives.

The strategy focuses on key themes that align with the enabling strategies for the 2020 vision, patient and citizen experience and clinician and staff experience. Research and development and education and training are not currently directly addressed.

Foundation Trust preparation will lead to further refinement over the coming months.

Local developments have not involved PPI. The Strategic Health Authority has the communication aspect of the national programme in hand. There is a need to engage the patients, GPs and public further.

The Trusts IM&T infrastructure has to date been developed by an annual block of capital. There is no proposed change to investment here but individual cases will be developed for specific pieces of work.

The core national programme systems are funded centrally. The increased burden of support has yet to be calculated fully as the scope of the programme is not yet decided. The Trust will look to reinvest the current funding that supports PAS (£200K)

To date work on the local programmes indicates £300K to install wireless networking which is an enabler. The Trust has decided to invest an additional £600K above the IM&T investment funds of £800 (£1.4m) for 2007/08-2010/11 but will release system savings to be advised to Trust Board. An IT plan is being worked up with divisions (draft attached) and this will be programme managed. The additional investment will take the Trust from 0.8% investment as percentage of turnover to around 1.5%.

One session of consultant time is required in the Trust to engage in clinical aspect of IM&T development - £10K pa.
Specific detail:

1. National programme for IT (NPfIT)

1.1. The NHS Care Records Service will replace the hospital’s core patient administration system (PAS) around the end of this calendar year (2007/8).

1.2. This is a massive change programme requiring input from all staff, who will need to adapt to new processes.

1.3. The change programme will focus on benefits for the Trust that will need to be profiled in and wherever possible accelerated. Opportunities will be taken to achieve early wins e.g. real time ADT.

1.4. The scope of the programme at SUHT is not yet fully decided and there are a number of key issues identified:
   a) Support for 18 weeks
   b) Functionality of results reporting and ordering
   c) Impact of retrospective data entry
   d) Ability to train our user base during the eight week period before Go live (rooms and trainers)
   e) The risk around the existing PAS and iSoft contract and hence the impact of any further slippage.
   f) Casenote tracking functionality

1.5. Recent review of the National mode of delivery has resulted in a more localised approach. The NPfIT Local Ownership Programme (NLOP) has therefore been tasked with setting up the structures to support this. Health Authority and PCT chief executive officers are designated senior responsible owner (SRO) for the delivery, and all health authorities are to have a plan to achieve level VI of the new Strategic Systems Maturity Model (SSMM) by 2011. Draft plans to be agreed by April 2007, showing where benefits are being obtained from the national product set, including NHS mail.

1.6. The national programme is moving to mainstream and the local investment and benefits will be performance managed.

1.7. Reference – NHS Operating Framework 2007/8
www.dh.gov.uk/assetRoot/04/13/86/34/04138634.pdf

2. Focus Areas

2.1. The national programme is not planned to address all of the Trust’s clinical and business IM&T needs in the next few years.

2.2. The Trust has published 20:20 Vision and the Trust will align service delivery with this. The IM&T strategy is congruent with this vision.

2.3. LINK TO SIX ENABLING STRATEGIES

2.4. Six focus areas have been identified, each of which has an outline strategic objective (see diagram 1):
   - Patients – To communicate electronically and securely, contributing to the patient experience (to include inpatient services such as telephony and entertainment)
   - Referrers – Ensure ease of access via streamlined processes at low cost to the referrer
   - Clinical - Allow collection of data as part of the clinical process and provide quality decision support information
   - Patient administration - Reduce the cost base by provision of efficient IM&T systems that support the modern business processes
   - Transactional - Provide accurate and timely data on activity for monitoring and billing purposes
   - Performance - Enable pro-active management through provision of analytical tools and quality information

See Appendix /Table 1.
3. Critical success factors are outlined in Figure 2. These will deliver the following value for the Trust:

3.1. Patients
- Communicating with patients in a modern, electronic way. Use of SMS and e-mail to be explored
- Enabling the patient on-line. Explore options for registration and updating information such as personal details
- Provision of a reasonably priced modern phone service for patients on wards (in and outbound)
- Provision of internet to patients possibly with their own devices (laptops etc) over wireless network
- Provision of entertainment over the Trust network i.e. on-line TV and multimedia services

The above assumes that we have the right to negotiate outside of the Patientline product, which appears to be the case.

3.2. Referrers
- Enable choice and direct booking by choose and book (part of the NCRS implementation)
- Provide consistent quality information by our web sites including protocol and pathway information
- Provide immediate electronic discharge summary
- Provide reports, results and letters electronically

3.3. Clinical
- Use the NCRS to provide care pathway support
- Implement clinical systems through HICSS and best of breed procurements that are integrated with corporate systems
- Enable the sharing of clinical data across organizational boundaries
- Provide decision support to assist clinical decision making
- Provide access to the GP record via CDR
- Provide knowledge via links through to approved knowledge sources on the internet

3.4. Patient Administration
- Replace the IBA PAS – inpatient, outpatient, ED, theatres
- Continue to drive benefits from PACS deployment
- Continue development of Order Communications via EQuest or NCRS
- Develop strategy for future management of casenote library looking at scanning solutions

3.5. Transactional
- Implementation of new SNOMED clinical terms and code mapping as part of NCRS
- Provision of real time information derived from new changed processes i.e. real time ADT (SPADE as the vehicle)
- Introduce performance management into data quality and provide tools to enable better compliance e.g. on-line tracing service
- Implement payment by results through the new NHS secondary uses service, NCRS and Casemix
- Implement systems/processes to support practice based commissioning
3.6. Performance
- Delivery of analytical tools for Trust managers through the SPADE portal
- Support the implementation and monitoring of the 18 week pathway
- Provide monitoring for A&E waits, access times, cancelled operations, cancer waits and MRSA

4. Risk

The IM&T risk register feeds into the main corporate register. The plan will address the high risks as follows:

3.7. Loose Filing and Results Acknowledgement
- Results are not 100% acknowledged in Trust systems and this has been picked up within Standards for Better Health. Targets have been set.
- Medical records policies continue to address the loose filing issue and in 2007 a business case is planned to scan the paper notes.

3.8. Disaster Recovery
- The Trust recognizes that its' IM&T infrastructure is now a mission critical environment. Traditionally it has relied upon resilience and backup. This however does not give assurance that a major incident could be recovered from. A report will be commissioned during 2007 detailing options for disaster recovery and this will be presented to the Board during the Summer.

3.9. Switchboard
- Options for procurement will be investigated and recommendations made during Summer 2007

3.10. PAS Supplier (iSoft)
- iSoft subject to takeover and risk to the obsolete SUHT PAS. It is hoped that NCRS will address this

3.11. NCRS business continuity
- A number of risks around NCRS deployment are being managed within that project.
### Appendix

#### Table 1 – Link to 2020 Short Term and Strategic Outcomes

<table>
<thead>
<tr>
<th>Short Term Aims</th>
<th>Core</th>
<th>Patients</th>
<th>Referrer</th>
<th>Clinical</th>
<th>Administration</th>
<th>Transactional</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospital of first choice</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sustainable financial position</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Rated as an excellent employer by 90% of staff</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td></td>
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<tr>
<td>4. Top quartile for quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5. Top 10 for education and training</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6. One of 5 best regarded public organizations in region</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
</tbody>
</table>

**Enabling Strategies**

| 1. Clinical services                                                           | ✓    | ✓        | ✓        | ✓        | ✓              |               |             |
| 2. Patient experience                                                          | ✓    | ✓        | ✓        | ✓        | ✓              |               |             |
| 3. Staff experience                                                             | ✓    | ✓        | ✓        | ✓        |               |               |             |
| 4. Education and training                                                       | ✓    |          |          |          |                |               |             |
| 5. Citizens experience                                                          | ✓    |          |          |          |                |               |             |
| 6. Research & development                                                       | ✓    |          |          |          |                |               |             |

#### Table 2 – Work Programmes

<table>
<thead>
<tr>
<th>Work Programmes</th>
<th>Core</th>
<th>Patients</th>
<th>Referrer</th>
<th>Clinical</th>
<th>Administration</th>
<th>Transactional</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infrastructure to support mobile working – wireless networking</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Modernize switchboard by bringing in digital telephony and use this to drive the ageing Siemens equipment. Use the new interface opportunity to replace bleep systems, run a call centre(s), integrate with the wireless network, use gateways to mobile networks cutting call costs.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Delivery of patient telephony, entertainment and internet</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Pilot new technologies for tracking (patients, equipment, notes) using RFID tagging</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>Patients</th>
<th>Referrer</th>
<th>Clinical</th>
<th>Administration</th>
<th>Transactional</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Roll out the electronic discharge summary and workflow with pharmacy, cutting the risk of uncontrolled drug documentation in the standard written discharge summary. The NCRS does not include this functionality</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Provide image sharing to further exploit the benefits of the new PACS system</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Utilise the Hampshire clinical data repository for: ISTC report conduit Acute clinician access to the GP record Source of mobile number for SMS contact to patients</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Develop a proposal for remote workers e.g. midwives for remote on-line access to maternity etc.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>9.</td>
<td>Develop the remote access into a supported home working environment cutting travel time and providing a better staff experience</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>10.</td>
<td>Make better use of what we already have: office systems and ESR</td>
<td>✓</td>
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<tr>
<td>11.</td>
<td>Develop 18 week monitoring and reporting</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12.</td>
<td>Develop information flows for patient level costing</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13.</td>
<td>Develop market intelligence</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14.</td>
<td>Develop more self service information for Trust managers – SPADE delivery</td>
<td>✓</td>
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</tr>
</tbody>
</table>

Note: Care pathways including ePathways are to be published in the first quarter of 2007. These will be assessed.
Figure 1

IM&T Strategy Objectives

Referrers
Ensure ease of access via streamlined processes at low cost to the referrer.

Patients
Communicate electronically and securely, contributing to the patient experience.

Clinical
Allow collection of data as part of the clinical process and provide quality decision support information.

Transaction
Provide accurate and timely data on activity for monitoring and billing purposes.

Performance
Enable pro-active management through provision of analytical tools and quality information.

Patient Administration
Reduce the cost base by provision of efficient IM&T systems that support the modern business processes.

IM&T Strategy
Driven by 20:20 Vision
Fig. 2

IM&T Strategy Success Factors

- **Referrers**
  - Booking
  - Web information
  - Discharge summary
  - Letters
  - Reports

- **Clinical**
  - NCRS
  - Care pathways
  - Clinical systems
  - Image and data sharing
  - Decision support
  - Knowledge

- **Patients**
  - Communication e.g. SMS
  - Electronic registration
  - Phone, entertainment and Internet

- **Patient Administration**
  - NCRS Out/Inpatients, ED, Theatres
  - PACS
  - Order Comms
  - Casenotes

- **IM&T Strategy**
  - Core functions: network, Hardware, access e.g. from home

- **Performance**
  - Support a reduction in waiting times, LOS and the 18 week pathway.
  - Tools to monitor objectives: SPADE

- **Transactional**
  - Coding
  - Real Time Information
  - Payment By Results

- **Figure 2**
Figure 3 – Short Term Project Plan

Task | Start | Finish | 2nd Quarter | 3rd Quarter | 4th Quarter | 1st Quarter | 2nd Quarter
--- | --- | --- | --- | --- | --- | --- | ---
1 | Scanning case Med Recs | Tue 15/05/07 | Mon 17/06/08 | | | | |
2 | Bus Case | Tue 15/05/07 | Mon 09/07/07 | | | | |
3 | Procure service | Tue 10/05/07 | Mon 01/07/07 | | | | |
4 | Convert library | Tue 02/06/07 | Mon 17/06/08 | | | | |
5 | Commerce paperless CP | Mon 01/06/07 | Mon 01/06/07 | | | | |
6 | Wireless Network | Tue 15/05/07 | Mon 17/06/08 | | | | |
7 | ED MAU for Disch Summ | Tue 15/05/07 | Mon 09/07/07 | | | | |
8 | Trust wide policy | Tue 10/07/07 | Mon 17/08/08 | | | | |
9 | Voice communication | Tue 15/05/07 | Mon 12/06/08 | | | | |
10 | ED/MAU | Tue 15/05/07 | Mon 09/07/07 | | | | |
11 | Radiology | Tue 16/03/08 | Mon 12/05/08 | | | | |
12 | Voice Recognition | Tue 15/05/07 | Mon 09/08/08 | | | | |
13 | Plot with 50 users | Tue 15/05/07 | Mon 09/07/07 | | | | |
14 | Productivity tests/scripts | Tue 16/05/07 | Mon 02/07/07 | | | | |
15 | Plan Trust project | Tue 10/07/07 | Mon 09/08/07 | | | | |
16 | RFID plans | Tue 25/12/07 | Mon 12/05/08 | | | | |
17 | Baby tracking | Tue 25/12/07 | Mon 21/01/08 | | | | |
18 | Blood testing | Tue 16/03/08 | Mon 14/04/08 | | | | |
19 | Equipment tracking | Tue 16/03/08 | Mon 14/04/08 | | | | |
20 | Patient tracking | Tue 16/03/08 | Mon 12/05/08 | | | | |
21 | Remote access working | Tue 15/05/07 | Mon 23/07/07 | | | | |
22 | Midwives pilot | Tue 15/05/07 | Mon 09/07/07 | | | | |
23 | Plan rollout | Tue 10/07/07 | Mon 23/07/07 | | | | |
24 | BlackBerry mail access | Tue 15/05/07 | Mon 25/06/07 | | | | |
25 | Setup and plot | Tue 15/05/07 | Mon 11/06/07 | | | | |
26 | Roll out plan | Tue 12/06/07 | Mon 25/06/07 | | | | |
27 | SMS message patients | Tue 18/03/08 | Mon 13/04/08 | | | | |
28 | Feasibility | Tue 16/03/08 | Mon 14/04/08 | | | | |
29 | Microsoft project | Tue 15/05/07 | Mon 21/01/08 | | | | |
30 | AD Divisional design | Tue 15/05/07 | Mon 11/06/07 | | | | |
31 | E-Mail design | Tue 15/05/07 | Mon 11/06/07 | | | | |
32 | Build | Tue 12/06/07 | Mon 21/01/08 | | | | |
33 | Home working | Tue 15/05/07 | Mon 03/09/07 | | | | |
34 | Decode scope (HR) | Tue 15/05/07 | Mon 11/06/07 | | | | |
35 | Plot | Tue 12/06/07 | Mon 03/09/07 | | | | |
36 | cDischarge Summary | Tue 15/05/07 | Mon 31/12/07 | | | | |
37 | Finalize application mode | Tue 15/05/07 | Mon 21/05/07 | | | | |
38 | Rollout | Tue 22/05/07 | Mon 31/12/07 | | | | |
39 | Device suitability | Tue 22/05/07 | Mon 13/06/07 | | | | |
40 | NCRS | Tue 15/05/07 | Mon 03/03/08 | | | | |
41 | Decode scope | Tue 15/05/07 | Mon 21/05/07 | | | | |
42 | Train/Implement | Tue 15/05/07 | Mon 21/05/07 | | | | |
43 | Go live | Mon 02/03/08 | Mon 03/03/08 | | | | |
Figure 4 – Long Term Timeline

01/02/2007 - 10/11/2007
Electronic Discharge Summary
Digital Telephony
Patient Services
PACS Data Sharing
Access to Clin Data Repository
Remote Working
Home Working

01/02/2007 - 04/03/2008
Infrastructure Work – Wireless LAN etc.

01/01/2009

01/01/2010
02/01/2010
NCRS R2

01/01/2011

02/03/2011

31/01/2008
NCRS R1 Deployment
(Discussions about possible R0
As per planning assumptions)

08/01/2011
NCRS R3
SSMM Level 6 compliant