

# **TRUST REPORT: CAD - USER REQUIREMENT & THE WAY FORWARD.**

## **1. INTRODUCTION**

1.1 On 22 February 2005 the SDC (Service Development Committee) approved a paper entitled “CAD – The Way Forward”. The paper proposed a two-phased approach to the problems and frustrations experienced with the existing CAD environment over recent years. Phase 1 was referred to as dealing with the “Immediate Requirements”. Phase 2 referred to a new CAD environment, identifying where the Trust needs to be by 2010. This paper refers to the second of those initiatives, known as the CAD 2010 Phase 2 Project.

1.2 Stage 1 of this project was described in that initial paper as “Procurement Preparation” with the intention to ...

*“define the user requirement, conduct market research (including looking at the existing Ambulance CAD products) and produce a business options report recommending how the new environment should best be provided ...”.*

The objective of this paper is to deliver to the Trust Board against these intentions, and set out the plans for proceeding.

1.3 In terms of controlling and managing this project, the PRINCE (PProjects In Controlled Environments) methodology has been implemented. One of the principles of this methodology is to break the project task into defined ‘products’ – each a logical component of the overall project. The completed products of this stage are listed below and are defined further at appendix 1.

### Product Listing for CAD 2010 Phase 2 Project - Stage 1

<b>No.</b>	<b>Title</b>
FS 1.1	LAS Organisational Background
FS 1.2	Current Operational Control Capability
FS 1.3	Current Businesses and Practices
FS 1.4	Current Technical Environment
FS 1.5	Initial List of Stakeholders
FS 1.6	Related Research, Systems or Initiatives
FS 1.7	Lessons Learnt
FS 2.1	Problems with Existing Facilities
FS 2.2	Drivers Or Other Reasons for Change
FS 3.1	Proposed Business Processes
FS 3.2	User Requirements
FS 3.3	Proposed Technical Environment
FS 3.4	User & Workshop Analysis
FS 4.1	Market Research
FS 4.2	Business Options

1.4 All of the products contribute in part to this paper, but three in particular are to be considered as core documents;

- FS 2.2: Drivers Or Other Reasons for Change.
- FS 3.2: User Requirements.
- FS 4.2: Business Options.

A précis of each of these are included in sections 5, 6 and 7 respectively, and the full products have been separately provided.

1.5 Overall, a great deal has so far been achieved that will form a sound basis for the future of the project. It has enabled the project to deliver against the plan and to exceed the expectations set within the initial paper of February 2005.

## **2. CONCLUSIONS**

2.1 The work described within this paper provides the rationale supporting the need for change to the existing CAD environment, the requirements, and the options available to the organisation. The research has revealed requirements of a scale and complexity far greater than was envisaged when the "CAD – The Way Forward" paper was presented to the Trust Board on 22 February 2005.

2.2 Initial analysis suggests that no commercially available CAD product, currently in use within the limited UK ambulance market place, will immediately meet the LAS's requirements.

2.3 At this stage of analysis the best solution for the provision of a new CAD environment appears to be through a commercial procurement to meet the specific requirements of the LAS. This would be either by:

- a) A prime supplier to design, develop and implement all necessary integration and bespoke interfaces
- b) A third-party integrator to design, develop and implement all necessary integration and bespoke interfaces
- c) The LAS engage suitable resources to design, develop and implement all necessary integration and bespoke interfaces in-house.

2.4 Given the scope, the Project Board propose that the project should follow a phased and modular approach to implementation. This will result in a rolling timetable of implementation scheduled over a number of years.

2.5 The Project Board propose that a third control room will be required in order to accommodate the implementation. This could also set the framework for a future hub approach to multiple control rooms.

2.6 Whatever the compelling arguments already articulated in this document, the Trust will require an appropriately detailed business case that will withstand external scrutiny to justify the investment. The Project Board are therefore proposing to proceed under the assumption that the business case will require SHA approval and that an initial Strategic Outline Case (SOC) is appropriate to provide a high-level view of the whole rolling timetable. This will be followed by appropriate more detailed business cases for each of the individual tranches.

### **3. RECOMMENDATIONS**

That the Trust Board;

- 3.1 Notes the delivery of the project against the plan and the progress to date.
- 3.2 Notes the scale and complexity of project (being far greater than that first envisaged).
- 3.3 Approves the project approach for the period December 2005 to July 2006.
- 3.4 Approves the user requirements, noting there is work yet to do to refine these further.
- 3.5 Approves the project proceeding on the assumption that the scope of the project will require SHA authority.

### **4. BACKGROUND & EMERGING THEMES**

- 4.1 The first stage of the project was an exploration into largely unknown territory. Its starting point was to establish appropriate controls and a suitable project structure. This allowed the level of understanding to evolve and to collect initial information to determine the scale, complexity and feasibility of seeking solutions. This was set against the requirement to report back to the Trust Board by the end of the calendar year.
- 4.2 In terms of control, a Project Board has been established, comprising 2 Directors, the Deputy Director of Finance, 3 senior user representatives and 2 technical representatives. An experienced consultant was appointed as the Project Manager, who took up post on 11<sup>th</sup> April 2005. The full Project Board have met six times and have provided regular reports to the Trust Board.
- 4.3 When referring to the LAS and the CAD system, memories of the events of 1992 will always arise. It is therefore important to put this into perspective. Product FS1.7, 'Lessons Learnt' analyses the 'Page' report (investigation into the 1992 CAD failure) and work has been undertaken to identify the relevant issues. By way of control, individual Project Board members have been allocated specific 'lessons' from 'Page' against which to monitor this project to ensure lessons are applied and mistakes are not repeated.
- 4.4 The perception gained at the start of this project was that the LAS requirements for a new CAD environment could probably be satisfied by a single procurement process. Expectations appeared to anticipate the selection of a core CAD product from a recognised supplier of ambulance CAD systems. There was anticipation that this would require a non-excessive amount of bespoke configuration or ancillary software coding in order to meet the specific needs of the LAS.
- 4.5 Analysis from this stage of the project undermines the validity this perception. The result of the user requirement capture process (undertaken during this stage) reveals a need for a solution that is of a far greater scale and complexity than available from an existing commercial product. Also, in order to reduce risk and maintain control, the solution will need to be implemented as a rolling timetable of phased delivery.
- 4.6 The initial research with suppliers of ambulance CAD systems to the UK market and, subsequently, with some of their customers are not encouraging. This has further heightened the awareness of the project that the scale and complexity of the challenges facing the LAS are significantly greater than initial expectations.
- 4.7 Options for physical implementation, using existing facilities at Bow, were considered but rejected on the grounds of risk. Consequently the Project Board agreed to the need for a third control room to be 'acquired' in order to accommodate the implementation.

- 4.8 The Project Board agreed that the project should follow a phased and modular approach to implementation and recognised that this will result in a rolling timetable of implementation scheduled over a number of years.
- 4.9 In the light of this the Project Board recognised that a business case prepared at this stage could only be valid for the first delivery (or tranche). It could not be valid for deliveries (or tranches) beyond this as business needs, costs and opportunities are all likely to change by the time subsequent tranches become due. Therefore a separate business case is required for each phase (albeit that many may share some common elements).
- 4.10 The Project Board also recognised the disappointing results from the scale of market research undertaken to date. They agreed that a much more detailed engagement is required to explore a broader supplier base, in order to determine:
- The feasibility of what is required
  - The capability of the market to deliver
  - The maturity of the market – establish the viability of suppliers
  - The capacity of the market
  - The approach of the project and the requirements
  - Innovative opportunities
  - Broad order of costs to build a business case.
- 4.11 The following three sections of this paper précis the products that provide the evidence for the overall direction set within this paper.

## **5. DRIVERS OR OTHER REASONS FOR CHANGE (Product No. FS 2.2)**

- 5.1 This product deals with two key issues;
- the reasons why there is a need to change the existing CAD system
  - the results from the initial market research.

### **Reasons for Change**

- 5.2 The NHS is currently undergoing a massive reform, the biggest since its inception 57 years ago. This reform, aimed at improving the patients experience and ensuring the NHS is a patient led service includes: The NHS Plan, National Programme for IT (NPfIT), Public and Patient Involvement, Foundation Trusts, Patient Choice, Reforming Emergency Care and Transforming NHS Ambulance Services. These are all programmes being implemented by the NHS to improve the quality of patient care delivered by NHS healthcare professionals. The London Ambulance Service NHS Trust as part of the NHS is required to align its strategic vision with that of the NHS as a whole. A new CAD environment that remedies the shortfalls of the present system is crucial to ensure the LAS succeeds in meeting its strategic vision and that of the wider NHS.
- 5.3 The LAS Service Plan and eventually the Strategic Plan that will come into effect in 2006/07 spans seven years and sets down the approach that the LAS will use to integrate with the wider plans for development in the NHS. This Strategic Plan has the patient experience at its core and crucial to achieving this plan is the implementation of a new CAD environment. This will have the ability, capacity and flexibility to handle both the increasing and changing demands on the Service culminating in the delivery of timely, appropriate and high quality patient-centred care.
- 5.4 In recent months there has been detailed consultation with stakeholders and business users of the CAD system by the project. It has become apparent that, in order for the Trust to conform to its strategic aims, it needs to improve on the existing call taking and dispatch processes as well as the CAD and other IT systems that support them.

- 5.5 The existing CAD system is now nearly 10 years old. It was developed in-house without a long-term future upgrade path. It does not have sound data architectures or a sufficiently flexible infrastructure. Over the years, it has been stretched, squeezed and expanded, by a single, internal, expert resource, to accommodate all manner of changes. It is also now virtually undocumented.
- 5.6 The current system requires a disproportionate amount of manual input and a heavy reliance upon the manual retention of information at each control position in order to maintain a comprehensive operational picture. It obstructs efficient, collaborative and flexible working within the control room, across the LAS and between NHS and other partner organisations. It also causes bottlenecks within the receipt and allocation of emergency calls.
- 5.7 The current system is not fault tolerant; consequently control room staff operate an inefficient parallel, paper-based system to ensure business continuity during failure. It does not exploit technological opportunities to predict or warn of potential deficiencies, delays or inefficiencies. It is unable to support the level of agility required of the modern ambulance service and it is not sufficiently resilient to provide the level of availability expected of a modern, emergency service.
- 5.8 The current system will not provide the level of service and contingency capacity required to guarantee safety in the lead up to or during the 2012 Olympic Games. It will not meet the growing and evolving demands of NHS emergency care services; and it will not support the effective operation of the LAS into the next decade.
- 5.9 Set against this background there are other key external factors that will place additional demand on the CAD environment, namely;
- Population growth
  - Improving current performance
  - 2012 Olympic Games
  - Reforming Emergency Care – alternative care pathways
  - Transforming NHS Ambulance Services - strategic review
  - The National Programme for IT (NPfIT)
  - Civil Contingency Act 2004

### Initial Market Research

- 5.10 Within the time box available for this piece of work it was decided that best value would be gained by:
- a) Visiting the Ambulance Exhibition (AMBEX) to gain an insight into the current offerings of key suppliers to the UK Ambulance CAD market. The following supplier stands were visited:
- M.I.S.
  - Zoll Ltd
  - Fortek
  - Cleric
  - VisiCAD (produced by TriTech Software Systems)
- b) Visiting a small number of UK ambulance services known to be using CAD systems which appeared of interest to the purpose of this component product and who could accommodate a visit from the LAS during the week scheduled within the current plan. The following Trusts were visited:
- |                                    |                           |
|------------------------------------|---------------------------|
| • West Country Ambulance Service   | M.I.S.                    |
| • Staffordshire Ambulance Service  | VisiCAD - and - Right CAD |
| • East Midlands Ambulance Service  | M.I.S.                    |
| • West Yorkshire Ambulance Service | M.I.S.                    |

**5.11** The initial conclusions were that:

- a) All companies supplying CAD systems did, individually, offer parts of LAS's requirements.
- b) The team's opinion was that no single provider currently had a system that supplied everything considered essential for the LAS requirements.
- c) Some companies seemed uninterested in developing their system to incorporate the LAS's requirements.
- d) There was no system that allowed Mobile Data Terminals to automatically update status.
- e) There was no system that allows part of an area to be removed and controlled from a separate control room in the event of a major incident.
- f) Some systems could not identify a vehicle becoming available nearer to an incident than that already assigned.
- g) Of the systems viewed a large reliance seemed to remain on the controller's knowledge of the area and the implied belief amongst suppliers (incorrect in the team's view) that a controller has time to monitor vehicle movement on a mapping system.
- h) None of the systems viewed gave insight into any innovative opportunities.
- i) There was evidence that strongly indicated that no single product exhibited would be likely to meet all of the essential requirements of the LAS.
- j) It was the opinion of the LAS visiting team that procurement of any of the exhibited systems would provide only limited areas of advantage over the current LAS CAD facilities.
- k) It was also the opinion of the visiting team that the suppliers viewed were unlikely to be able to provide the scale of support necessary to ensure adequate maintenance and on-going development of an LAS system sufficient to meet a rolling programme of development.

**5.12** The following is an indicative list of potential capability losses by implementing an existing product 'off the shelf':

- **MPS CAD Link:** Interface with partner organisation improves patient care reducing 999 calls by between 5 – 10%.
- **Pre-emptive CAT A calls:** Pre-emptive prioritisation of a CAT A call providing earliest notification to Controller.
- **Vehicle & Crew Rostering:** The default roster of vehicle call signs and associated crew to enable immediate use with changes being managed as exceptions.
- **Full Integration with MDTs:** To enable crews to directly update their status within the CAD.
- **Pre-Shift Vehicles:** The means to accommodate within the CAD and therefore fully control a vehicle and its crew that commence a shift earlier than rostered.
- **X-Ray Vehicles:** The means to accommodate within the CAD, and identify, a vehicle and its crew that remains on shift later than rostered.
- **Remote Control:** Capability to run CAD on laptops to accommodate events such as, for example, Notting Hill Carnival.
- **Green Desk, FRU, and HEMS:** Filtering of calls for attention by specialist resources or input from a medically trained practitioner.
- **Logging of all AMPDS PRO QA Data:** Inclusion within the CAD log of all responses recorded to AMPDS call triage.
- **Full Integration with Radio/Cortex:** Integration between radio and Cortex to reduce duplication, improve accuracy and minimise opportunities for error.

- **Logging of ETA Information:** Inclusion within the CAD log of ETA information directly from the vehicle Satellite Navigation system.

## 6. REQUIREMENTS CATALOGUE (Product No. FS 3.2.1)

6.1 This product deals with the definition in 'User Speak' of what needs to be done to:

- retain essential capability inherent within the existing Emergency Operation Centre (EOC) function
- redress the identified problems with the existing system
- satisfy the drivers or other reasons for change of the existing system
- exploit the opportunities discovered for London Ambulance control functions.

6.2 The project has collected information from the following sources:

- a) A sequence of 6 sets of requirement workshops, inviting over 50 selected members of staff, covering nearly 30 different groups of users.
- b) Decomposition and analysis of the entire content of the "User Specification for Windows CAD, version 3.2". A document prepared entirely by the user community over a period that commenced some 18 months – 2 years before the start of this project.
- c) Definitions of requirement for the existing CAD systems, derived by this project 'reverse engineering' the existing EOC functions. These are recorded within the Current Operational Control Capabilities (Product No. FS 1.2).
- d) Other, ad hoc, sources of information; i.e. review of requirement catalogues of other ambulance services (Kent & GMAS), input directly by the Project Team or Project Board, etc.

6.3 The current Requirements Catalogue, in 'User Speak', comprises over 1400 individual requirements. These originate as follows:

- |  |   |     |
|--|---|-----|
| • Current Operational Control Capabilities | - | 158 |
| • Requirement Workshops                    | - | 625 |
| • Windows CAD document                     | - | 635 |
| • Ad hoc sources                           | - | 33  |

The actual Requirements Catalogue is a separate MS-Excel spreadsheet in which each requirement will be traceable from its source, throughout refinement into tender documents and, ultimately, to successful delivery or conscious rejection. It will be available at the Trust Board for members to view.

6.4 The requirements indicate a need for a distributed and fault tolerant architecture. This means a single 'system' (i.e. a potential suite of applications) with near perfect availability that can be accessed by dedicated or non-dedicated desktop computers located anywhere in which the LAS can provide a suitable (and suitably secure) network connection. This includes control room(s), HQ offices, ambulance stations and other premises; as well as mobiles (e.g. The Emergency Control Vehicle) or other secure remote access facilities. This also establishes the architecture to support the concept of distributed hubs.

6.5 The product provides an outline of the requirements in terms of business areas, for example:

- Emergency Operations Centre
- Call Taking & Gazetteer
- Superintendent & Sector Controller
- Allocation & Dispatch
- Mapping – MDT – Satellite Navigation – Crew
- Sector & Staff
- Emergency Planning – Major Incident Handling – Gold Control
- Press & Public Affairs – Patient Advice Liaison Service (PALS)
- Fleet

- Automatic Medical Priority Dispatch (AMPD) – Quality Assurance (QA)
- Electronic Patient Record – Hand Held & Other Input Devices
- Resource Centres – Meal Breaks
- Management Information
- Training
- Central Intelligence Init (CIU) & Loggist

6.6 It is important to note that this product addresses 'what' is required in 'User Speak'. It does not deal with 'how' this might be provided.

## 7. BUSINESS OPTIONS (Product No. FS 4.2)

7.1 The purpose of this product is to set out the high-level business options for a new CAD environment, in the light of the research conducted during this stage; and to identify to the Trust Board those that appear to be best suited to the needs of the LAS. It is also to set out a high-level approach for implementing a solution.

7.2 The perception gained at the start of this project was that the LAS needs for a new CAD environment could probably be satisfied by a single procurement process. Expectations appeared to anticipate the selection of a core CAD product from a recognised supplier of ambulance CAD systems. There was anticipation that this would require a non-excessive amount of bespoke configuration or ancillary software coding in order to meet the specific needs of the LAS.

7.3 The user requirement capture process undertaken during this stage reveals a need for a solution that is of a far greater scale and complexity than this. A need which, in order to reduce risk and maintain control, will need to be implemented as a rolling timetable of phased delivery.

7.4 This report considers the options available to the LAS in the light of the scale and complexity of the requirements revealed during the requirement capture process. The options are:

1. **Do Nothing:** Discontinue the current CAD 2010 Phase 2 Project
2. **Do Minimum:** Only minimal changes beyond the Phase 1 Project
3. **Further Develop Existing CAD:** Further development of the existing CAD systems (as per option 1 listed within "CAD – The Way Forward" paper).
4. **LAS In-house Development:** The LAS engage suitable resources to undertake a completely new in-house development (as per option 2 listed within "CAD – The Way Forward" paper).
5. **LAS In-house Progressive Development:** A hybrid of options 3 & 4 where the LAS engage suitable resources in-house to build progressively around the existing CAD system in a way designed to facilitate a gradual migration to a new environment.
6. **Simplify Requirement to Meet COTS Product:** Limit and simplify requirements to enable the procurement of a commercially available product (known as a 'Commercial Off The Shelf' - COTS - product), combined with the development of bespoke interfaces (as per option 4 listed within "CAD – The Way Forward" paper).
7. **Commercial Procurement:** Commercial procurement(s) for a newly developed solution(s) to meet specific requirements of the LAS (as per option 3 listed within "CAD – The Way Forward" paper), with either:
  - a) A prime supplier to design, develop and implement all necessary integration and bespoke interfaces
  - b) A third-party integrator to design, develop and implement all necessary integration and bespoke interfaces
  - c) The LAS engage suitable resources to design, develop and implement all



necessary integration and bespoke interfaces in-house.

8. **Provision by Third Party:** The provision of a CAD system by a third party (e.g. the MPS) (as per option 5 listed within “CAD – The Way Forward” paper).

At this stage of analysis Option 7 appears to be the best option.

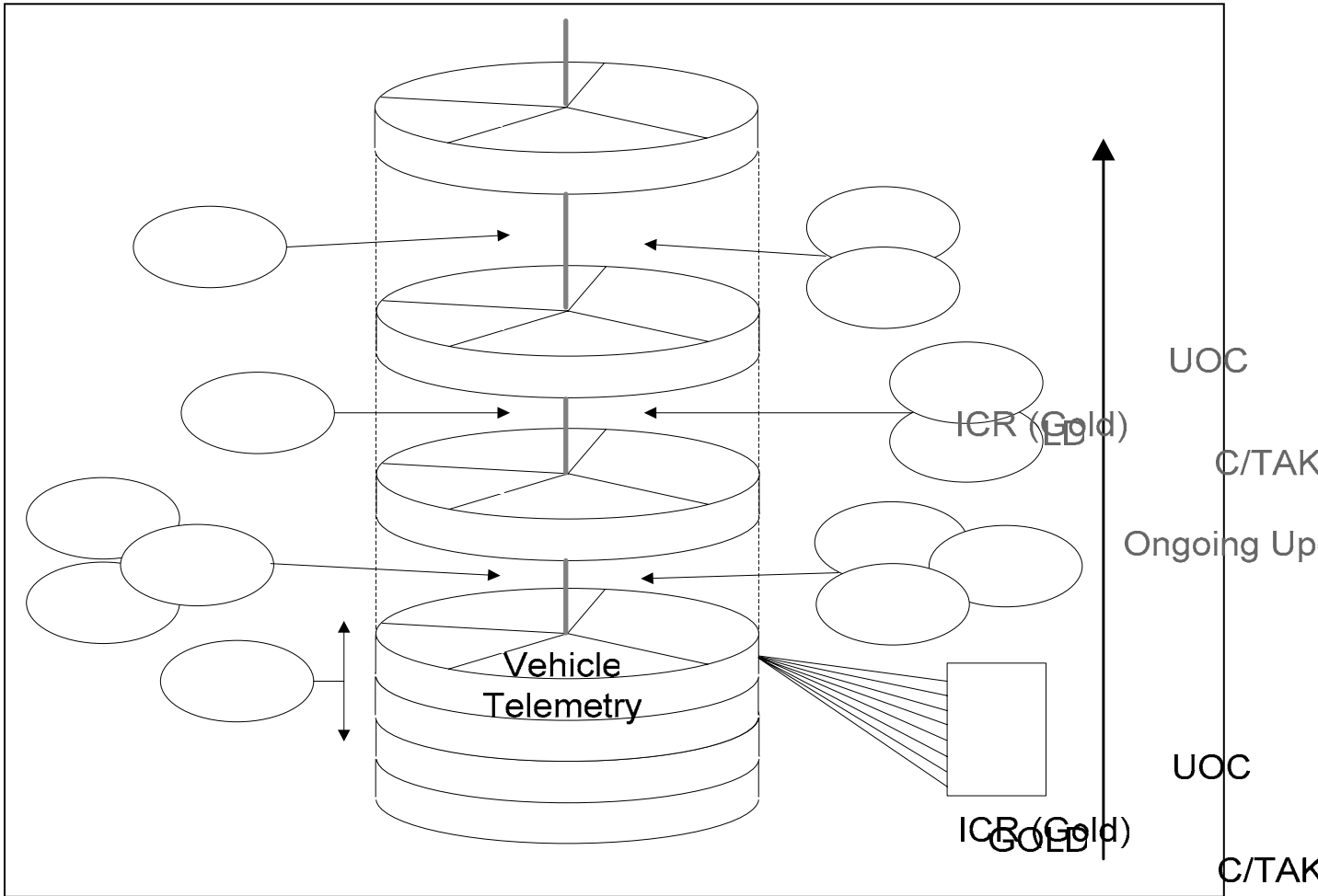
7.5 The Project Board have considered whether the implementation of the solution(s) should be a ‘big bang’; in other words, implement the complete solution in a single, massive operation; or through a phased and modular approach. The Project Board recognised that the CAD system is the mission critical LAS system. They also recognised the level of change that will be involved by implementing the requirements of the scale and complexity now revealed and the consequent enormity of the risk to which the LAS will be exposed should implementation be undertaken as a single massive operation. The Project Board also noted:

- The Office of Government Commerce (OGC) best practice guidelines which advise against single, large-scale implementation.
- The Cabinet IT Action (NAO/OGC Common Causes of Project Failure) which identify lack of sufficient attention to breaking development and implementation into manageable chunks, as a cause of failure.
- The Lessons Learnt from the ‘Page Report’ following the implementation of the LAS CAD system in October 1992.

Taking into account all of the above points, the Project Board have agreed to a phased and modular approach to implementation

7.6 The diagram below illustrates this phased and modular approach as a ‘stack’ being built from the bottom up. This does not seek to define the actual approach, order or grouping of modules (represented by the ‘bubbles’), nor does it seek to set the number of implementations of ‘core CAD’ software to three. It is purely a representation of the approach, in the context of this project and, as such, it provides a visual indication of the scale and complexity of business change that the organisation is considering embarking upon.

Diagram 1: Representation of a Phased & Modular Approach to Implementation



**8. PROPOSED WAY FORWARD**

3rd CAD IMPLEM

8.1 As defined within the Business Options section of this report, analysis to date suggests that a commercial procurement may be the best option for implementing a new CAD environment. However, the scale and complexity of the requirement and the limited commercial market place require a planned, controlled approach. For this reason, the Project Board are proposing a pragmatic approach to the way the project proceeds to minimise the risk of incurring unnecessary delay through poor planning or failure to adopt the market best practices (i.e. an appropriate business case to meet the more detailed scrutiny of the SHA, in the event that Whole Life Cost exceed the Trusts delegated limits).

Advanced Gold Control

UOC

ICR (Gold)

C/TAK

**Business Case**

2nd CAD IMPLEM

8.2 Whatever the compelling arguments articulated in this document, the Trust will require an appropriately detailed business case that will withstand external scrutiny, to justify the investment. It will provide a description of the reasons for the project and the justification for undertaking it, based on the estimated costs, risks and the benefits that it is expected to deliver to the LAS. It will be required to cover the entire scope of the business change affected by the project. It will also document the information necessary to drive and support a series of decisions that, over time, increasingly commit the Trust to the procurement.

Satellite Navigation

Mapping

WDTs

UOC

ICR (Gold)

UOC

C/TAK

Airwave

Radio

GOLD

UOC

8.3 The business case will provide a framework for informed decision-making regarding the planning and management of the project. It will be used continually to maintain alignment of the project's progress with LAS objectives and to monitor the on-going viability of the project. Starting as a high-level summary of possible options to meet the business need, it will evolve

1st CAD IMPLEM

GOLD

UOC

FULLY EQUIP

and mature progressively throughout the procurement. The business case should contain information covering five key aspects:

- strategic fit - the Strategic Case
- options appraisal - the Economic Case
- commercial aspects - the Commercial Case
- affordability - the Financial Case
- achievability. - the Management Case

- 8.4** Recognising the scale and complexity of the requirements revealed during the current research and the phased approach proposed, the Project Board also note the difficulties in constructing a valid business case, at this stage, for those elements of a rolling timetable that might be implemented within the latter stages. This is because, by that time, the needs and priorities of the LAS may have changed while the technology and potential solutions will certainly have changed.
- 8.5** The Project Board are therefore proposing to proceed under the assumption that the business case will require SHA approval and that an initial Strategic Outline Case (SOC) is appropriate to provide a high-level view of the whole rolling timetable, followed by appropriate more detailed business cases for each of the individual tranches.
- 8.6** The project has started preparation of the SOC and is planning to engage with the Capital Investment Unit (CIU) of the SHA after the New Year to seek their advice and guidance on its composition. Guidance will also be sought regarding the subsequent, more detailed, business cases necessary to approve the subsequent tranches of development.
- 8.7** The scale and complexities of the business needs that are now revealed require a far more comprehensive engagement with the potential supplier base to best inform the business case and reduce risk. This work will start in the New Year in order to enable delivery of the SOC to the Trust Board at the March 2006 meeting.
- 8.8** Preparation of the more detailed business case for the first tranche of delivery will benefit from the advice of the CIU and the information learned from engagement with the supplier base. This will provide greater clarification of the potential Whole Life Costs, the necessary approving authority and, therefore, whether the Trust can exploit the expediency available through the use of the LAS Combined Business Case or whether the SHA will require a more rigorous approach to be followed. The Project Board have concluded that completion of this business case in time for the May 2006 Trust Board is unrealistic and therefore they propose to schedule this for the July 2006 meeting.
- 8.9** Between now and delivery of the appropriate business case for the first tranche of delivery, the project will also establish essential project controls, undertake detailed planning for the first tranche, and conduct the Gateway 1 Review. They will also start work to determine the additional requirements needed (as outlined at section 5.3 of the Requirements Catalogue at Appendix 2) and reworking the entire Requirements Catalogue to remove duplicates or conflicts and convert each requirement from 'User Speak' into 'Clear Speak', ready for the work to prepare the tender invitation.
- 8.10** The outline plan for further reporting to the Trust board:
- January 2006: No report planned
  - March 2006: Strategic Outline Case / Project update
  - May 2006: Project update
  - July 2006: Combined business Case / Report on Gateway 1 Review / Plans for next stage.

*Peter Suter*

Director of Information Management & Technology

Appendix 1: CAD 2010 Stage One Product set.

No.	Title	Outline of Content
FS 1.1	LAS Organisational Background	Consistent with the 'Strategic Case' element of a Business Case, this product provides a summary of the LAS, including the organisational purpose, vision and aspirations; its core functions; organisational structure; the population served and the resources available.
FS 1.2	Current Operational Control Capability	This product is an Excel Workbook describing 18 'areas' of existing control room capabilities, as a baseline requirement, and in order to prevent unintentional loss of current capability.
FS 1.3	Current Businesses and Practices	This product documents the existing business processes of the Emergency Operations Centre.
FS 1.4	Current Technical Environment	This product documents the existing technical environment relevant to the existing control room function.
FS 1.5	Initial List of Stakeholders	This product identifies the individuals, groups or organisations having an interest in or influence over this project or who are (potentially) affected by or dependent upon its activities or outcomes. This includes customers and recipients of the service.
FS 1.6	Related Research, Systems or Initiatives	This product documents known initiatives, whether within LAS, the NHS or beyond, that are related to this project and which could be affected by or dependent upon the outcomes of this project or that this project could be affected by or be dependent upon. It provides a rationale for that relationship and establishes a baseline from which the relationships can be managed throughout the project life-cycle.
FS 1.7	Lessons Learnt	This product catalogues the key lessons applicable to this project, emanating from the 'Page Report' following implementation of the LAS CAD system in October 1992 and establishes a method for them to be prioritised and monitored by Project Board members.
FS 2.1	Problems with Existing Facilities	Following interviews with the Trust Chairman, Chief Executive, many Directors and other Senior Managers, this product documents and charts the key strategic problems or deficiencies with the existing control room facilities, from which are derived a list of 'Desired Outcomes'. The Desired Outcomes are then mapped to Business Benefits, via interim benefits. This product underpins the Business drivers and enables the requirements to be validated and prioritised.
FS 2.2	Drivers of Other Reasons for Change	<p>This product is in two parts and forms part of the first deliverable to the Trust Board. The first part is the source document providing the basic business justification for doing anything.</p> <p>The second part documents the result of the initial market research with suppliers and customers of ambulance CAD systems to the UK.</p>

FS 3.1	Proposed Business Processes	Using Current Business Processes as a baseline (FS 1.3) this product defines new business processes, practices and non-technical interfaces relevant to the Ambulance Control function(s) that will redress relevant problems or deficiencies; or support the satisfying of other drivers or other reasons for change; or the exploitation of opportunities.
FS 3.2	User Requirements	This is a set of products and forms part of the first deliverable to the Trust Board. The Requirements Catalogue document (FS 3.2.1) provides a comprehensive summary of the spreadsheet detailing all requirements in 'User Speak'.
FS 3.3	Proposed Technical Environment	This topic is outlined within the Requirements Catalogue document (FS 3.2.1).
FS 3.4	User & Workshop Analysis	This product was developed in parallel with the Initial List of Stakeholders (FS 1.5), to determine which elements of the organisation are users or potential users of the existing or future system and who should be included in the requirement workshops. Then to plan those workshops.
FS 4.1	Market Research	Awaits detailed, structured engagement with the supply base as an input to preparation of the tender(s)
FS 4.2	Business Options	This product forms part of the first deliverable to the Trust Board. It provides a high-level qualitative analysis of the key options available to the LAS and makes recommendations of those to progress through a short list.