

# Central Bedfordshire Council

Appendix A

ICT Stability Programme – Capital Business Case

August 2011 - v0.3

## 1 Introduction

### 1.1 Background

At the inception of CBC an initial ICT transition budget of £9m was proposed. The activities were de-scoped to £3m to fit within the available budget.

ICT infrastructure stability was questioned after a major six day outage of systems in February 2010.

The major outage was caused by the failure of two disks on the storage area network (SAN) located in Borough Hall. Further shorter outages were caused by mains power outages.

External consultants were commissioned to audit the environment and develop an action plan to prevent subsequent failures of this nature from occurring again.

While the action plan was completed in December 2010, some of the tasks in the ICT Stabilisation Phase 1 plans were to investigate what else was required to ensure continued stability. For example, one of the actions was "to undertake a SAN and Infrastructure review". This was completed and led to the plan to move the Bedford data centre to a commercial hosted site to improve power supply stability.

On 15<sup>th</sup> December 2010, ICT resource requirements to deliver a sustainable ICT environment were presented to senior officers who concluded that it was appropriate for these plans to be validated, drawing on external expertise". The external consultants were requested to verify the emerging stability plans as they had existing knowledge of the CBC infrastructure from the initial audit.

On 23<sup>rd</sup> and 30<sup>th</sup> March 2011 additional resources in ICT were authorised and the consultants were asked to assist ICT in formalising a detailed plan for ICT stability, and what impact this would have on existing ICT priority projects.

The detailed plan was endorsed by officers subject to further analysis and consultation with directorates on the prioritisation and scheduling of the business projects that need to run in parallel with the Stability programme. This analysis was completed in June with a complete ICT Project Schedule that meets the current business requirements.

Support for proceeding were subject to securing additional capital funding for the ICT Stability Programme within 2011-12. This funding is crucial to provide the resources required to deliver the outcomes of the programme within the tight timescales required.

#### 1.2 Scope

The ICT Stability Programme is designed to deliver a fit for purpose ICT Infrastructure. Fit for purpose means that users of the infrastructure, citizens, partner organisations, suppliers, officers and members should expect to carry out their business requirements without being restricted by the infrastructure environment.

It is not intended that the programme will deliver a best of class environment or even

a highly resilient infrastructure. With the constraints on the shrinking public purse these would be inappropriate and unviable.

The programme will deliver an ICT environment therefore that:

- Is available during office hours to agreed service levels.
- Performs at an appropriate speed as defined by service levels.
- Provides the appropriate tools to enable effective working.
- Has published maintenance schedules and advanced notification of planned downtime.
- Delivers a web site that is available for citizens 24 hours a day 7 days a week except for the planned maintenance schedule.
- Ensures data is securely backed up and recoverable in line with the Business Continuity and Disaster Recovery plans.
- Is secure and compliant with the required security standards.
- Has implemented defined Standard Operating Procedures ensuring the infrastructure is proactively monitored and maintained on an ongoing basis.
- Implements a structured ICT project delivery process and procedures.

Whilst providing a fit for purpose infrastructure, this programme will not mitigate against every risk – doing so would be impractical and financially unviable. As a consequence and to ensure a focus on successful delivery of the stabilisation programme,, a number of "desirable" elements have been omitted from this programme, as follows:-

- A second data centre that automatically takes over from the main data centre in the event of a major failure. (Typical once a year event).
- Dual supplier networked buildings (three core buildings) that remove the risk of a single physical network failure. (Typical once a year event).
- Power generation capability to prevent power failure at Priory House and Watling House. (Typically one to three times a year).
- Upgrades of Microsoft products (e.g. Office 2010, Windows 7).
- Improvements to user applications.

### 1.3 Purpose of Document

This document sets out the case, both strategic and financial for the ICT Stability Programme.

The analysis in this document is a business case, providing:

- An analysis of the strategic benefits that are envisaged by implementing the Programme;
- Estimates of the financial benefits and costs that are anticipated for the implementation.

It is important to note that exact costs and timescales will depend upon the precise detailed design and audit work that is carried out in the early stages of the programme. As such, these estimates are subject to change once this is known. However, a contingency has been allowed to cope with such changes.

This document will be reviewed by the Executive and seeks approval by full Council as the required capital variation to an existing scheme is over £500,000; this is in accordance with the governance procedures of the Council.

# 2 Strategic Case

#### 2.1 Council Priorities

The Council's over-arching priority is to efficiently and effectively provide a range of valuable services to the citizens of Central Bedfordshire, and through those services make a significant improvement to the lives of all those people.

In delivering its core services, the council needs to be businesslike and responsive. A modern local authority relies heavily on ICT systems both to run the organisation and to deliver its services, often in real-time where the protection of vulnerable clients is concerned.

ICT systems are therefore embedded in the key processes that are used to ensure good quality services can be maintained, right from taking the first telephone call from a citizen through to managing ongoing case work and handling incidents and requests from the public. Council officers rely on important applications to manage the financial and people aspects of a large authority in an efficient and effective way, and to store core data that supports wide-reaching strategic decisions that affect the lives of everyone in Central Bedfordshire, as well as its role in the wider world.

When ICT systems fail occasionally, it can be frustrating and an annoyance to users, but if outages are dealt with quickly and services resume, the effect may be transient. However, when systems fail repeatedly and frequently, and are either slow or difficult to use, the burden upon the organisation can become intolerable, and all council services are badly affected. The ICT Stability Programme has been designed to bring the CBC ICT infrastructure to a state where it supports the council in delivering its services, and continues to operate in a safe and stable fashion into the future, through continuing good operational practices.

#### 2.2 Current System Limitations

The ICT infrastructure at Central Bedfordshire was designed at the inception of the authority as a flexible and resilient platform to support the new authority. However, pressures of time and budget constraints meant that the implementation was rushed, documentation was poor and ongoing operating procedures were non-existent.

Moreover the ICT support team created from the legacy authorities was significantly under-resourced compared with other authorities of a similar size. With the extensive Transition work required during this period, the ongoing operational tasks inevitably suffered, and so the required maintenance of the infrastructure did not take place.

Therefore it is understandable that unexpected failures can occur across CBC's main ICT systems. In some cases, all 2,500 ICT users across the council are affected, and are unable to carry out their core job functions until services resume.

The most significant technical problems are in the following areas:

- The Citrix system, which is where every user is presented with the
  applications that they use in their job. This is a very flexible product, but a
  failure stops all users across the council. Therefore it needs to be resilient to
  hardware failures and perform well.
- The Microsoft platform, which sits underneath Citrix and provides user logins and network connectivity. Without this working efficiently users cannot gain access to their applications.
- The data storage systems (SAN) that hold all the council's data. It is crucial that this is held securely, is resiliently available and is always backed-up.
- Some of the key Applications that council officers use in their jobs have particular faults that have proven difficult to resolve easily, but which pose a constant and recurring impediment to the effective use of the system.

The ICT Stability Programme is therefore divided into workstreams that tackle these specific areas ('Get it right'), as well as a separate workstream that puts in place the Standard Operating Procedures to ensure the systems are kept updated and well-managed in the future ('Keep it right').

## 3 Financial Case

#### 3.1 Overview

The ICT platforms and their problems described in Section 2 are fundamental to the efficient working of the council. It is unlikely therefore that the authority will continue to meet its service obligations and its strategic objectives if the problems are not resolved in a timely manner. Therefore the overriding business case for the ICT Stability Programme is strategic as described above.

However, in order to illustrate the financial implications of not proceeding with the programme, one should consider the cost of the lost productivity when systems become unavailable for extended periods of time. These 'outages' have often affected all 2,500 council users at once, and the SAN issue that was encountered in February 2010 lasted 6 days. Since that time there have been several outages that have lasted for around 1 day.

Therefore there is a significant potential improvement in staff productivity by implementing this programme.

While it is difficult to predict such events, the experience over the past 12 months has been that if nothing were done, the council would remain vulnerable to several such outages each year into the future. The work will not eliminate all such occurrences, but will make them fewer in number, more pro-actively managed and more quickly resolved.

#### 3.2 Capital Costs

In this section, the following have been outlined to support the one-off implementation of the required changes:

- Costs, including software, hardware and external resources, either to support the implementation or to provide backfill to enable Council officers to progress the implementation; and
- Internal resource requirements, though these have not been costed unless specific backfill requirements have been identified.

The full Stability programme is estimated to cost circa £2.25m in terms of ICT staff time. Whilst this amount is already covered by the ICT staff budgets it is worthwhile noting that this amount of effort is being expended on Stability that would otherwise be utilised on service improvement activities and delivering business as usual activities.

Once the Stability programme is complete some of the expended effort will be utilised on capital improvement projects further reducing the draw down on existing revenue staff costs.

The entire Stability programme has been sub-divided into 10 workstreams. Of these, five were identified as top priority as outlined in Section 2 above, and are considered

for completion in 2011-12. A further five workstreams have been de-prioritised until 2012-13, and it is anticipated that these will be funded from the ICT Infrastructure rolling capital programme in that year.

The schedule has some external dependency costs. The programme requires additional resources from external suppliers, the purchase of new systems, additional modules and upgrades, as well as one-off programme and project management and technical contractor costs, and is estimated to cost a total of £719k of capital funding in 2011-12. This will be covered by:

- £160K from the existing ICT Infrastructure capital rolling programme
- £559K additional capital funding in 2011/12.

### 3.3 Summary

The above is summarised in the following table:

	Existing ICT Infrastructure Capital 11/12 Budget (£000)	Additional Capital Required 11/12 (£000)	Additional Capital Required 12/13 (£000)
Provision of new infrastructure and implementation	160	294	206
Programme Director (contractor)	0	100	0
2x Senior Technical Analyst (contractors)	0	99	33
Project Manager (contractor)	0	66	0
Total	160	559	239

### 3.4 Financial Profile

The following table outlines the capital cost profile for the ICT Stability Programme, based on the implementation plan in Section 4. Revenue costs shown represent the ongoing cost of capital, if funded via borrowing.

Cost Profile	2011-12	2012-13	2013-14	2014-15	2015-16
Capital Costs	£559,000	£239,000	£0	£0	£0
Revenue Impact (cost of borrowing and MRP)	£28,733	£152,817	£200,617	£200,617	£200,617

# 4 Implementation

#### 4.1 Timescales

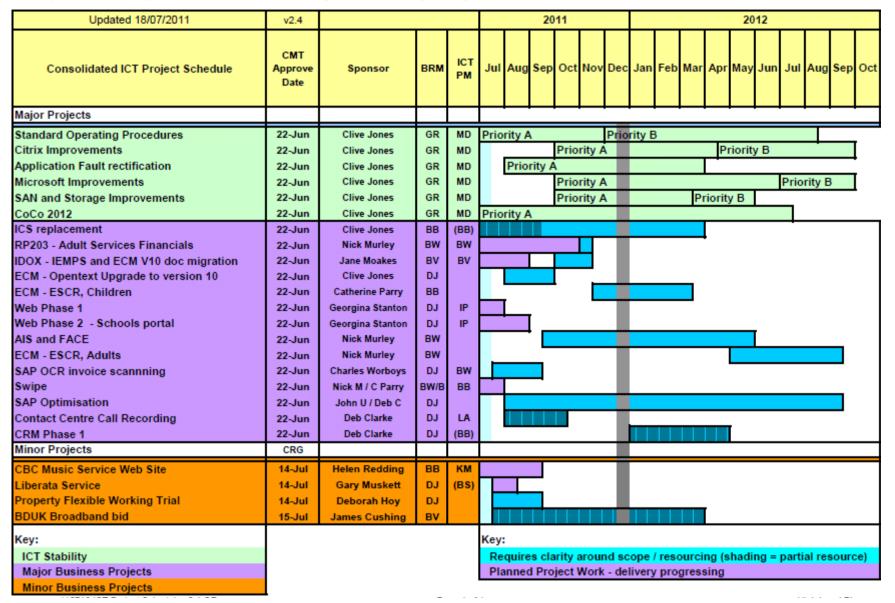
An implementation schedule is shown on the following page as Section 4.3. The ten workstreams of the ICT Stability Programme, plus the ongoing workstream required to ensure security compliance for CBC, are shown shaded in green, while the parallel business projects are shown shaded in purple. Together with current minor projects this represents the entire ICT project workload, and can therefore show how the ICT Stability Programme can be successfully delivered alongside the other ICT priority demands.

#### 4.2 Governance

It is vitally important that ICT implements good project governance controls alongside this programme to ensure that changing priorities can be met. The project management will follow the council's PRINCE2-based methodologies, and the programme management will use the corresponding MSP (Managing Successful Programmes) methodologies.

Overlaying these standards, a new ICT Governance model is already being established to exercise the necessary controls over new project requests from across the authority, and to manage the detailed allocation of ICT resources across all the competing projects, as well as the business-as-usual demands of running an ICT Service.

### 4.3 Complete ICT Project Schedule, including ICT Stability Programme



# **5 Next Steps**

#### 5.1 Existing Capital Scheme

In the 2011 - 2012 Capital budget planning process it was identified that ongoing investment in the council's ICT infrastructure was required, and an existing scheme of £856,000 was proposed and approved by the Executive for an ICT Infrastructure Programme as part of the overall Capital programme for 2011 -2012.

The majority of this programme has already been spent or allocated, but £160,000 was intended to be spent on areas that have now become part of the ICT Stability Programme.

### 5.2 Proposed Capital Scheme Variation

Executive are now requested to vary this capital scheme allocation by £559,000 to £1,415,000 to enable the ICT Stability Programme to proceed. In the meantime for expediency, initial work on the programme has already started, utilising the £160,000 in the existing scheme.

#### **5.3 Proposed Procurement Process**

The work packages within the ICT Stability Programme in themselves are not large enough to amount to contract values that are over the EU threshold limit and therefore will not be subject to European Tendering procedures (OJEU). Contracts will be awarded through tendering under existing approved procurement frameworks and with existing suppliers under existing contract arrangements.