

Nottingham City Council IT Recommendations

ACTICA/PC024D003 v2.0

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Document History

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1.0.0	Daniel Goldstein	24/10/2014	First issue to client
2.0.0	R Busby & D Goldstein	31/10/2014	Final Issue following minor addition

Glossary

Abbreviation	Expansion
BAU	Business As Usual
CAP	Customer Access Programme
CLT	Corporate Leadership Team
COTS	Commercial Off The Shelf
DIP	Document Image Processing
DR	Disaster Recovery
EMSS	East Midlands Shared Services
FOC	Free Of Charge
ICT	Information Communication Technology
IPR	Intellectual Property Rights
ITEF	IT Efficiency Fund
MDM	Master Data Management
NCC	Nottingham City Council
NIS	Northgate Information Solutions
R&B	Revenues and Benefits
SIAM	Service Integration and Management
SIP	Service Improvement Plan
SLA	Service Level Agreement



1 Introduction

1.1 General

1.1.1 This document details the recommended actions to address and mitigate the issues with the Council's IT Services, as reported in Actica's IT Services review document (PC024D002 V3.0 – Nottingham City Council IT Review). The recommendations contained in this report have been allocated a High', 'Medium' or 'Low priority, a proposed implementation timescale for delivery and the associated cost of implementing the recommendation.

1.2 Background

- 1.2.1 Nottingham City Council ('the Council' or 'NCC') is facing a period of unprecedented funding cuts at the same time as a growing demand for its front line services. Consequently there is a need to make substantial reductions in cost over the coming years. However, the need for an intensive period of investment, in both money and human resource has occurred at a time when both the Council and the IT service have had to implement significant spending cuts.
- 1.2.2 If the Council is to take advantage of the current investment in Information and Communication Technology (ICT) and to realise benefits that this can deliver, it is essential that it ensures this complex and critical support function is managed, financed and delivered in the most efficient way possible.
- 1.2.3 NCC decided to tender for a root and branch review of the Council's existing ICT Service. This review has now been completed. The scope of the review included: deployed technology, software, infrastructure, support services, the management of IT Services and its capacity and flexibility to deliver the core business services required by the Council, both now and in the future.
- 1.2.4 The first Actica report highlighted a number of issues within IT Services, however Actica also identified a positive trajectory in terms of improvements being made to the service and client perception of these. The report also noted that many of the issues identified in the report were due to a combination of historical under-investment and the frequent changes to IT Services leadership, which led to poorly defined direction and strategy.

1.3 Scope

1.3.1 To detail the actions required to address the issues highlighted in the Actica IT Review report, the recommendations have been prioritised, given projected timescales and the associated cost of implementation and delivery.

1.4 Document Status

1.4.1 This document is the final version for delivery to Nottingham City Council.



1.5 Document Structure

- 1.5.1 The remainder of this document is laid out as follows:
 - a. Section 2 gives the recommendations;
 - b. Appendix A gives an explanation of the 'Tower Model' that can be used for the delivery of IT services;
 - c. Appendix B provides an example of the 'Tower Model' that could be implemented at NCC.



2 Recommendations

2.1 Introduction

2.1.1 In this section, a summary of the issues highlighted in the first Actica report are presented, together with the recommendations to resolve these.

2.2 Issues requiring resolution

- 2.2.1 The first report highlighted 30 issues with IT Services that required attention, it was determined that two of these should be amalgamated into related items and so this report focuses on 28 issues. A summary of these issues is presented below in Table 2-1. The issues have now been categorised and prioritised as either:
 - a. High: requiring immediate attention because:
 - 1. the remediation of these issues may impact the Council's ability to resolve current and/or future service delivery issues, which in some cases will prevent meaningful service improvements until addressed;
 - 2. in flight projects are already underway and require urgent review, or completion.
 - b. Medium: issues that require urgent attention but which do not impact the resolution of other issues (i.e. not on a critical path).
 - c. Low: to be addressed as part of a longer-term strategy.

Category	Ref	Issue	Priority
	I-1	At the highest level, there has been a lack of a coherent IT strategy regarding how IT should be used to 'enable' the delivery of the corporate strategy.	High
	I-2	The lack of continuity and regular changes in IT leadership and management of the IT team has led to a perception of instability, lack of clear leadership and continuous changes in strategy and direction.	High
	I-3	The current IT Services structure is one of 'Matrix Management' and lacks clear leadership of core function making accountability and the measurement of effectiveness difficult.	High
	I-4	Some IT Service team managers have technical skills but lack management skills, whilst others have management skills but lack technical skills.	High
Strategy	impact analysis on the NC of the operation is concern money'. There is a lack of services and information reconstruction the lead in terms of system tailored to suit the County	The EMSS operation appears not to have had clear benefit objectives, an impact analysis on the NCC services and, certainly as far as the finance side of the operation is concerned, it appears not to have delivered a 'value for money'. There is a lack of alignment between the needs of unitary .v. county services and information needs of the partners. The County appear to take the lead in terms of system design and function, the system has been highly tailored to suit the County and there is a lack of in-house expertise at the City to challenge the decisions or support the system.	Medium
	I-6	Much emphasis has been placed on the Customer Access Programme (CAP) project to deliver customer service improvements but the programme appears to have developed a separate strategy, without due consideration of how the solutions will be implemented, integrated and supported.	High



Category	Ref	Issue	Priority
	I-7	The proposed Northgate Revenues and Benefits partnership is another example of local vs corporate strategy. Apart from ensuring that the commercial arrangements balance risk and reward, it appears that little consideration has been given as to how an independently run and managed service will integrate with the CAP initiative.	High
	I-8	Client data (e.g. name, address, family connection, client/case reference numbers) can be held in several different council systems (e.g. benefits, council tax, housing social care, planning) and there is currently no easy or simple solution to providing a 'master' or 'golden' record that allows the data sources to be related to one another.	Medium
	Poor recording of installed IT estate and infrastructure (both hardware and software asset registers) and the condition, effectiveness, maintenance and support of the estate.		High
	I-10	IT staff are fire-fighting and the focus is on 'business as usual' at the expense of project delivery. The general attitude to project work is that it takes second priority to the BAU activities i.e. the teams are too busy filling potholes to consider resurfacing the road.	Medium
	I-11	The pass-through of service requests from the service desk to 3rd line support often fails, with 3rd line support either failing to action service requests in a timely manner, not passing the request onto the most appropriate person/team, and in some cases closing calls without resolution.	Medium
IT	I-12	There is a lack of co-operation between the IT 'operational' silos with one team taking actions that affect another team, without consultation or consideration of impact.	High
Organisation	I-13	With no formal Service Catalogue and associated SLAs client departments perceive that they receive poor value for money from IT with little control over investment or use of resources.	Medium
	I-14	This lack of a Service Catalogue and associated measurable SLAs results in client/user frustration and dissatisfaction.	Medium
	I-15	The Council has many diverse operations and services. Comment was made that a generic IT service does not best serve the Council, as there can be no 'one size fits all' approach.	High
	I-16	Current IT services spend/budget appears to be out of kilter with peer group organisations.	High
	I-17	Current salary bands for technical resources appear not to reflect current market rates and restrict/prevent the recruitment and/or the retention of appropriately skilled resources.	High
	I-18	Single points of failure in the limited DR/business continuity infrastructure.	High
	I-19	Historic underinvestment has resulted in high level day-to-day maintenance and support issues and a significant level of dissatisfaction amongst service users with a blame culture aimed at IT services.	Medium
IT Infrastructure		The commissioning of in-house application development is poorly managed.	
	I-20	2. It has been reported that many of the in-house developed applications are poorly documented.	Low
		3. The rationale for an in-house development team has been questioned.	



Category	Ref	Issue	
		Over reliance on in-house server hosting facilities, which results in implications with:	
		 the overall management of these services; 	
	I-21	the requirement for the in-house skills needed for maintenance and administration of server and hosting technology;	Medium
		the logistics for housing servers (e.g. accommodation and power);	
		 the requirement for disaster recovery for the server estate (the associated cost, planning and activities). 	
Human	I-22	Views have been expressed that some IT management may be technically qualified but lack management capability and/or experience.	Medium
Resources	I-23	A view that restructuring has added another level of management but there aren't any more bodies to actually deliver the work.	Low
Finance	I-24	There has been a clear lack of IT investment over recent years that has undermined the stability and effectiveness of the IT infrastructure and estate. It has been that this under investment is a case of not spending available funds, as opposed to funds not being available	High
	I-25	The need for an intensive period of investment, in both money and human resource has occurred at a time when both the Council and the IT service have had to implement significant spending cuts i.e. a perfect storm scenario.	High
Corporate	I-26	The lack of the formal involvement of IT Services in the specification and design of the IT elements of new initiatives e.g. CAP and the Northgate Revenues and Benefits partnership.	Low
Processes	I-27	Current policies and procedures relating to procurement and recruitment are sometimes perceived to be bureaucratic and the 'one size fits all' processes are potentially a barrier to effective operations and service delivery.	Low
Charges for IT Services	I-28	Low perceived value of IT service, lack of clarity over its costs and poorly assigned ownership of those costs.	

Table 2-1: Issues within IT department

2.3 Summary of recommendations

- 2.3.1 Of the 28 issues summarised in Table 2-1, this report makes a recommendation for 24 streams of work to be undertaken to remediate them (with issues I-10 & I-11 and I-13 & I-14 sharing actions). It should be noted that under Simon Salmon's leadership, five of these actions are already underway.
- 2.3.2 Details of the proposed remedial actions can be found in section 2.6 of this report, where the recommendation reference corresponds to the issue reference (i.e. R-12 is the recommendation for issue I-12). Table 2-2 below summarises these in terms of the priority, together with the number of remedial actions already in progress.

Actions to address	Total number of actions	Actions in progress
High priority issues	15	4
Medium priority issues	9	1
Low priority issues	4	0

Table 2-2: Summary of actions

2.4 Critical path

- 2.4.1 Whilst many of the recommended actions in this document stand alone, it should be noted that dependencies do exist between many of them and that others would benefit from being addressed in a logical order. Of particular importance is the need for the Council to make a strategic decision on how it wants IT Services to support the Council's future business and service delivery strategy (issue I-1). This decision will dictate the levels of savings or investment and structural changes that are required.
- 2.4.2 Figure 2-2 on the following page illustrates the critical paths and dependencies between the remedial actions. From left to right the diagram indicates the quarter in which work needs to be scheduled (start and finish), with actions already in progress coloured blue. The full key for Figure 2-2 is shown in Figure 2-1 below. The letter *n* in each task box represents the recommendation reference from Table 2-3.

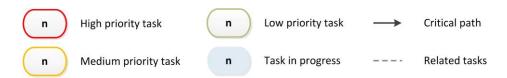


Figure 2-1: Key for critical path diagram

2.5 The Perceived Value of IT Services

- 2.5.1 One of the major themes identified throughout the review was a lack of perceived value of IT Services and confusion over its costs and how client departments funded these. This theme was a factor in many of the identified issues and is felt by both clients/customers and IT Services themselves. This lack of clarity, and the accountability for costs/charges, has led to clients questioning the value of provided services, expressing the view that they have little control over discretionary spend and are unable to relate costs to deliverables. In addition, IT Services themselves have found that they are funding items and/or services (e.g. mobile telephony) for which they have no control or allocated budget.
- 2.5.2 Within the Recommendations section (section 2.6) this issue (I-28) has been addressed with recommendation R-28. It has been specifically highlighted as it contributes to many of the other issues listed in this report.
- 2.5.3 The implementation of the proposed resolution of this issue would be very closely linked with that of recommendation R-3, the structure of IT Services (see Table 2-3).



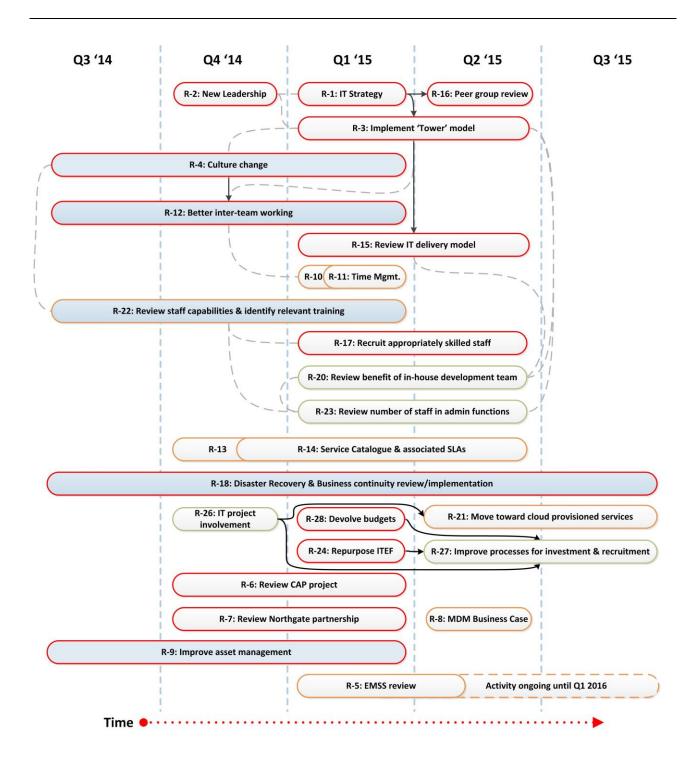


Figure 2-2: Recommendations critical path



2.6 Recommendations

Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-1	At the highest level, there has been a lack of a coherent IT strategy regarding how IT should be used to 'enable' the delivery of the corporate strategy.	 Confirm what the Council/ corporate leadership is expecting IT Services to deliver e.g.: a. an 'engine room/ Business as Usual' operation; b. to act as an 'Enabler of Change; c. to provide a blend of the above. Create an IT strategy board, allowing the heads of all of the departments to contribute to the direction of IT, thus making an IT strategy that supports the Council's business strategy. Ensure that the Head of IT Services is a member of this board, to provide guidance on practicability and cost effectiveness of proposals and to take ownership of delivering the strategy Ensure that service investment requests are prioritised at department/directorate level before being aggregated and prioritised at a corporate level to ensure that investments are made wisely, managed well and are in accordance with corporate objectives. 	 Clear leadership from the Council's Members and Senior Management Team. Unambiguous understanding of the role, function and cost of IT Services. Investment decisions are open and agreed. IT Investment is prioritised at both a directorate and corporate level. 	Start: Q1 2015 Finish: Q1 2015	Investment to be confirmed following the below activities: 1. CLT's decision on the type of IT service required (i.e. BAU vs agent of change); 2. peer group spend review.	High
R-2	The lack of continuity and regular changes in IT leadership and management of the IT team has led to a perception of instability, lack of clear leadership and continuous changes in strategy and direction.	Advertise and appoint a new head of IT services with an end objective of creating stability and leadership.	1. Stability in IT Services leadership will stop the ever changing personal agendas and priorities that have happened with the frequent personnel changes of the past. 2. Staff will react well to stability. 3. Clients will do likewise.	Start: Q4 2014 Finish: Q4 2014	CLT time. There are potential salary savings.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-3	The current IT Services structure is one of 'Matrix Management' and lacks clear leadership of core function making accountability and the measurement of effectiveness difficult.	1. Restructure IT Services into a 'Tower' service delivery model (see Appendix A for more information on the 'Tower Model' and Appendix B for an example of its implementation at NCC). 1. Restructure IT Services into a 'Tower' service delivery model (see Appendix A for more information on the 'Tower Model' and Appendix B for an example of its implementation at NCC).	 A simplified structural model will facilitate the development of service catalogues. Provides clear lines of responsibility. Functional areas of responsibility can then be better targeted and monitored. Improved inter-team working can be more easily fostered and managed. Separating functions into 'service towers' facilitates market testing and, if desired, the commissioning of service lines e.g. data hosting. Clearly demarks the service functions and promotes clarity in financial reporting. 	Start: Q1 2015 Finish: Q2 2015	 IT Services management time to design and implement the tower model. HR time to agree structure & job grading. Unless investment is approved, any structural changes should be self- financing. If market testing is desired/required there are procurement costs associated with this process. If commissioning is adopted there would be an associated cost of procurement and contract management therefore each proposal should be 'business case' driven. 	High
R-4	Some IT Service team managers have technical skills but lack management skills, whilst others have management skills but lack technical skills.	 Implement proposed culture change programme and ensure that personal development plans which address these issues are prepared, managed and monitored. 	 Improved personal development. Improved staff morale. Improved service delivery. Improved customer satisfaction. 	Start: In progress Finish: Q1 2015	 Management and staff time. HR support. Training. 	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-5	The EMSS operation appears not to have had clear benefit objectives, an impact analysis on the NCC services and, certainly as far as the finance side of the operation is concerned, it appears not to have delivered 'value for money'. There is a lack of alignment between the needs of unitary and county services, and information needs of the partners. The County appears to take the lead in terms of system design and function, the system has been highly tailored to suit the County and there is a lack of in-house expertise at the City to challenge the decisions or support the system.	 Having due regard of the contract-break opportunity in 2017, commission a review of the current operation in terms of effectiveness, service delivery, value for money and contract review opportunities. Research, review and cost alternative service delivery option. Prepare a business case with a recommended approach as to the future delivery of this service. Ensure the timely delivery and commissioning of the above to ensure that if alternative service delivery arrangements are recommended, sufficient time is allowed for specification, tendering, procurement and implementation of the new service in line with contract break commitments. Review other unitary Authority Oracle consortia opportunities (e.g. One Oracle1). See: http://democracy.brent.gov.uk/documents/s21313/or acle-report.pdf http://www.content-loop.com/slideshare/the-one-oracle-project-shared-services-with-oracle-e-business-suite-and-bi-applications/ http://www.londoncouncils.gov.uk/capitalambition/projects/programmeathena.htm 	 A service tailored more closely to the needs of the Council. Working with 'peer group' local authorities. A 'seat at the table' when making investment and software development decisions. Improved financial management infrastructure. Make service improvements and cost savings a required outcome. 	Start: Q1 2015 Finish: Q1 2016	1. Officer time. 2. The criticality of the project demands, either the appointment of an internal resource or external advice. Note: The above work will scope costs and savings resultant in resolution of this issue.	Medium

 $^{^{1}\} http://www.londoncouncils.gov.uk/capitalambition/projects/programmeathena.htm$



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-6	Much emphasis has been placed on the CAP project to deliver customer service improvements but the programme appears to have developed a separate strategy, without due consideration of how the solutions will be implemented, integrated and supported.	 The CAP programme is currently on hold, pending a review. The following issues were fed back: The tender was very restrictive, asking that any company that did not own the Intellectual Property Rights (IPR) to the technology that they were bidding for were barred from competing. This meant all resellers of products and services from major providers (e.g. Microsoft, Oracle etc.) couldn't compete for the bid. The tender appears to have been issued as a technical specification, as opposed to a functional one. It appears to force a cloud based solution, which is high risk for software handling calls and voice data. It is recommended that the current tender be abandoned and the market advised. The CAP Business Case and desired outcomes should be reviewed. The delivery model and back-office integration requirements clarified. When this process has been completed a new specification should be prepared (including removal of the IPR ownership requirement) and the document re-issued to the market. 	The major benefit will be the delivery of a solution that will enable the delivery of a service that achieves the desired outcome of putting "Citizens at the Heart", combined with measurable improvements in service delivery. Enabling the above, the Council should expect: 1. improved supplier relationships; 2. an improved and technically superior offering; 3. better integration between front- and back-office systems; 4. a clear service delivery model; 5. future sustainability.	Start: Q4 2014 Finish: Q1 2015	A review must be carried out; this cost could either be internal staffing time or external resourcing. Cost of retendering.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-7	The proposed Northgate Revenues and Benefits partnership is another example of local vs corporate strategy. Aside from ensuring that the commercial arrangements balance risk and reward, it appears that little consideration has been given as to how an independently run and managed service will integrate with the CAP initiative.	 Ensure that the following issues have been or will be addressed prior to contract signature: What management support and expertise is Northgate Information Solutions (NIS) putting into the company? What management support and expertise is NCC putting into the company? Is there a firm and legally binding undertaking from NIS to bring jobs associated with the Document Image Processing (DIP) operation to the City? If so, are there guarantees as to the number of jobs that will be created? Is there a firm and legally binding undertaking from NIS to bring jobs associated with the Revenues and Benefits (R&B) service to the City? If so, are there guarantees as to the number of jobs that will be created? What is the road map for software development and are upgrades and associated maintenance free-of-charge (FOC) to NCC? What service commitments and SLAs is NCC IT Services expected to sign up to? What are the penalties for infrastructure breakdowns or failure to meet SLAs? If the R&B operation is a separate entity (both legally and commercially), how will integration and co-operation with the CAP programme be managed, contracted and handled? Consider a managed service option for the Northgate systems given the supplier relationship. 	1. If all of the issues listed are addressed, then the Council will be entering into a relationship that has clearly defined roles and responsibilities, combined with clear service financial and performance objectives.	Start: Q4 2014 Finish: Q1 2015	1. Officer time. 2. The criticality of the project demands, either the appointment of an internal resource or external advice. 3. The above work will scope any additional costs required to resolve this issue.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-8	Client data (e.g. name, address, family connection, client/case reference numbers) can be held in several different council systems (e.g. benefits, council tax, housing social care, planning) and there is currently no easy or simple solution to providing a 'master' or 'golden' record that allows the data sources to be related to one another.	Undertake a business review and prepare a business case for the introduction of Master Data Management (MDM). MDM is a comprehensive method of enabling an enterprise to link all of its critical data to one file, called a master file, which provides a common point of reference. When properly implemented, MDM streamlines data sharing among the organisation's personnel and departments.	 A single view of client(s) data. The ability to link individuals, families, property and interactions with the Council. Reduction in the risk of missing critical relationships when handling sensitive cases. Improved client service delivery. Faster turn-around of client queries and/or the resolution of complaints. Long term reduction in the cost of serving clients. 	Start: Q2 2015 Finish: Q3 2015	1. The cost of research and the preparation of a Business Case. Note: The actual costs will depend on whether the Council uses internal or external resources. If the former, it is an indirect/lost opportunity cost and if the latter, the cost will be dependent upon the brief and submitted prices.	Medium
R-9	Poor recording of installed IT estate/infrastructure (both hardware and software asset registers) and the condition, effectiveness, maintenance and support of the same.	Improved asset management project already underway.	 Improved management of the asset life cycle. Lower asset leakage. More reliable infrastructure. Less service downtime and disruption. Improved customer satisfaction. Improved service delivery. Improved license compliance and management. 	Start: In progress Finish: Q1 2015	In place: 1. two posts conducting a review of software and hardware assets; 2. three additional temporary posts are in place reviewing software licensing and agreements until April 2015.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-10	IT staff are fire-fighting and the focus is on 'business as usual' at the expense of project delivery. The general attitude to project work is that it takes second priority to the BAU activities i.e. the teams are too busy filling potholes to consider resurfacing the road.	 Ensure that time/resource/project management recording is stringently enforced. Use the data provided to manage staff and projects more effectively in order to deliver a more 'balanced' service delivery model. The adoption of the proposed 'Tower' service delivery model will create clear lines of accountability and responsibility with staff time more stringently managed. Note: An improved process (and associated system) for time recording for project management is already in place, alongside this there is an inflight project to deliver improved incident management time recording which is due to be complete Q1/Q2 2015. 	Improved management of IT human resources, leading to reduced reactive maintenance. Improved project delivery. Improved cost management and cost efficiency. Improved customer satisfaction and service delivery.	Start: Q1 2015 Finish: Q2 2015	Investment already made for new software tools required. Management time to implement and monitor.	Medium
R-11	The pass-through of service requests from the service desk to 3rd line support often fails, with 3rd line support either failing to action service requests in a timely manner, not passing the request onto the most appropriate person/team, and in some cases closing calls without resolution.	 Ensure that time/resource/project management recording is stringently enforced. Use the data provided to manage staff and projects more effectively in order to deliver a more 'balanced' service delivery model. The adoption of the proposed 'Tower' service delivery model will create clear lines of accountability and responsibility with staff time and resources more stringently managed. Note: An improved process (and associated system) for time recording for project management is already in place, alongside this there is an inflight project to deliver improved incident management time recording which is due to be complete Q1/Q2 2015. 	Improved management of IT human resources, leading to reduced reactive maintenance. Improved project delivery. Improved cost management and cost efficiency. Improved customer satisfaction and service delivery.	Start: Q1 2015 Finish: Q2 2015	Investment already made for new software tools required. Management time to implement and monitor.	Medium



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-12	There is a lack of co- operation between the IT 'operational' silos with one team taking actions that affect another team, without consultation or consideration of impact.	 Implement culture change programme and ensure that personal development plans, which address these issues, are prepared, managed and monitored. Encourage inter-team meetings where any issues can be aired and addressed. Use the introduction of the proposed 'Tower' service delivery model to introduced unambiguous definitions of inter-team working 	 Improved personal development. Improved staff morale. Improved service delivery. Improved customer satisfaction. 	Start: In progress Finish: Q1 2015	 Management and staff time. HR support Training 	High
R-13	With no formal Service Catalogue and associated SLA's client departments perceive that they receive poor value for money from IT with little control over investment or use of resources.	 Complete review and publication of Service Catalogue and associated Service Level Agreements (SLAs). Ensure that Service Catalogue and associated SLAs are manageable and measurable. Consider the introduction of devolved budgets to directorates/departments for 'non-core/chargeable' IT services. This would place buying power with clients and create a value-for-money' trading relationship. Note: IT Services will be the preferred service delivery partner and departments would only have option to use external resource if IT Services are unable to deliver to agreed timescales 	 This offers clarity of service offerings, costs and charges. Improved customer satisfaction. Improved project delivery. 	Start: Q4 2014 Finish: Q2 2015	IT services time If commissioning is chosen then there is an additional cost for procurement.	Medium



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-14	The lack of a Service Catalogue and associated measurable SLAs result in client/user frustration and dissatisfaction.	 Complete review and publication of Service Catalogue and associated Service Level Agreements (SLAs). Ensure that Service Catalogue and associated SLAs are manageable and measurable. Consider the introduction of devolved budgets to directorates/departments for 'non-core/chargeable' IT services. This would place buying power with clients and create a value-for-money trading relationship. Note: IT Services will be the preferred service delivery partner and departments would only have option to use external resource if IT Services are unable to deliver to agreed timescales 	 This offers clarity of service offerings, costs and charges. Improved customer satisfaction. Improved project delivery. 	Start: Q4 2014 Finish: Q2 2015	IT services time. If commissioning is chosen then there is an additional cost for procurement.	Medium
R-15	The Council has many diverse operations and services. A comment was made that a generic IT service does not best serve the Council, as there can be no 'one size fits all' approach.	 Restructure IT Services into a 'Tower' service delivery model' (see Appendix A for more information). The adoption of this model would provide clear lines of responsibility and facilitate the management and monitoring of effectiveness and accountability. Review current delivery model for each service tower and consider market testing. Evaluate the scope for and the benefits of commissioning 'generic' IT services e.g. hosting, telecoms and Wide Area Networks (WAN) management. 	 A simplified structural model will facilitate the development of service catalogues for the service and for the teams within the service. Functional areas of responsibility can be targeted and monitored. Improved inter-team working can be more easily fostered. Separating functions into 'service towers' facilitates market testing and, if desired, the commissioning of service lines e.g. data hosting. Clearly demarks the service functions and promotes clarity in financial reporting. Where there are niche skill requirements the Council can use externally commissioned resources. 	Start: Q1 2015 Finish: Q2 2015	1. IT Services management time to design and implement the tower model. 2. If market testing is desired/required there are procurement costs associated with this process. Note: If commissioning is adopted there would be a contract management cost.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-16	The Socitm survey indicates that the current IT services spend/budget appears to be out of kilter with peer group organisations.	 Confirm what the Council/corporate leadership is expecting IT Services to deliver, for example: a. an 'engine room/ Business as Usual' operation; b. to act as an 'Enabler of Change'; c. to provide a blend of the above. Given the lack of confidence in the figures reported by Socitm it is recommended that, having agreed the above, a 'peer group' survey be undertaken to establish comparative spend: a. as a percentage of the annual corporate budget; b. by IT coasts per client IT services user; c. by IT coasts per head of population. Having completed the above and analysed the findings, review current expenditure on IT services and, if necessary, revise budgets either up or down. 	 Clear leadership from the Council's Members and Senior Management Team. Unambiguous understanding of the role, function and cost of IT Services. Investment decisions are open and agreed. IT Investment is prioritised at both a directorate and corporate level. A realistic and balanced budget which reflects the aspirations and desires of the organisation. 	Start: Q2 2015 Finish: Q2 2015	Investment to be confirmed following the below activities: 1. outcome of CLT's decision on the type of IT service required (i.e. BAU versus agent of change); 2. peer group spend review.	High
R-17	Current salary bands for technical resources appear not to reflect current market rates and restrict/prevent the recruitment and/or the retention of appropriately skilled resources.	 Whilst accepting the fact that restrictions may be imposed by national and/or local pay scales and/or agreements, it is recommended that key IT Services roles/posts are identified, local salary surveys undertaken, the findings reviewed and then acted upon. It is further recommended that the local/regional sharing of highly skilled resources be explored. For example, NCC have the need for a Network Architect, however they do not require a full time resource in this area. If the cost of the resource could be shared between partner councils, this would allow the hiring of appropriately skilled resource at a competitive salary. 	 Increased opportunity to recruit suitably skilled resources. Retention of the same. Resource sharing enables economies of scale/cost reduction. Resource sharing facilitates knowledge transfer. 	Start: Q1 2015 Finish: Q2 2015	If a dedicated NCC resource, increased pay scales result. If resources are shared (where practicable) then cost savings are possible.	High



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-18	Single points of failure in the limited DR/business continuity infrastructure.	Currently, it is reported that only 5% of NCC data is backed up in a secure environment. Whilst it is understood that work is underway to address some of the associated issues, it is recommended that a full 'Business Continuity' study is undertaken to identify all risks and a business case is produced which details mitigating factors, corrective actions and the associated costs required to reduce and/or eliminate the exposure currently facing NCC operations.	 Confidentiality of Council data. Availability of Council data. Integrity of Council data. Continuity of service delivery. Improved compliance with data retention legislation. 	Start: In progress Finish: Q3 2015	Investment already made for new infrastructure. Management time to implement and monitor.	High
R-19	Historic underinvestment has resulted in a high level day-to-day maintenance and support issues and a significant level of dissatisfaction amongst service users with a blame culture aimed at IT services.	1. Whilst corrective action is taking place to address this issue, the fact that so much work has to be undertaken over a short timescale means that instead of a cyclical annual renew/replacement programme, involving a percentage of the installed estate, the Council is potentially faced with another period of heavy investment and resource demand in approximately five years. To avoid this situation, it is recommended that all items of IT infrastructure are recorded and managed in an annual renewal/replacement plan with a 20% per annum replacement policy.	 Improved management of the asset life cycle. More reliable infrastructure. Less service downtime and disruption. Improved customer satisfaction. Improved service delivery. Improved budgetary control and expenditure profiling. Avoidance of unplanned/emergency expenditure. 	Ongoing	No additional investment above current ITEF and SIP commitment. There is potential for savings over the medium to long term.	Medium
R-20	The commissioning of in-house application development is poorly managed. It has been reported that many of the in-house developed applications are poorly documented. The rationale for an in-house development team has been questioned.	1. Whilst initially reviewing all support documentation for inhouse developed applications, it is recommended that the rationale for an in-house development team is assessed and the cost effectiveness of this function be compared with a migration to the commissioning of software applications by external companies (be they Commercial of the Shelf (COTS) or bespoke). If a supporting business case proves the commissioning role to be more cost effective, the associated financial benefits can be redirected to allow the recruitment of technical staff able to support the existing infrastructure and new projects.	Improved documentation eliminates loss of knowledge caused by staff turnover. Improved application support and maintenance. Commissioning software development as and when required aligns expenditure with demand. Improves decision making related to the development of bespoke versus COTS solutions.	Start: Q1 2015 Finish: Q2 2015	Costs around possible restructuring costs. Countered by possible reduction in costs through commissioning or the adoption of COTS solutions.	Low



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-21	Over reliance on in-house server hosting facilities, which results in implications with: 1. the overall management of these services; 2. the requirement for the in-house skills required for maintenance and administration of server and hosting technology; 3. the logistics for housing servers (e.g. accommodation, power, rack space); 4. the requirement for disaster recovery for the server estate (the associated cost, planning and activities).	Implement a process which includes a default for 'Cloud based' services/solutions. Review all existing systems to determine whether there is a business case for moving any of them to the cloud.	 Leveraging of technical expertise of large cloud based organisations, with no need in house specialist staff. Capacity can be ramped up, or down, as required. Negates the need for capital investment. Negates the need for renewal and replacement policies and funds. The service provider manages all DR, requirements and system availability SLAs. Reduces burden on internal IT to manage and maintain hardware and software required in delivery of the services moved to the cloud. Decommissioning of services and systems does not result in redundant legacy hardware, which needs to be properly disposed of. Reduction (and possible elimination) of server hosting facilities. Including the provision of backup DR services. 	Start: Q2 2015 Finish: Q4 2015	1. CLT time.	Medium





Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-22	Views have been expressed that some IT management may be technically qualified but lack management capability and/or experience.	It is recommended that all IT management role profiles and person specifications are reviewed and all current post-holders assessed and appraised against these for effectiveness and capability. Any skill gaps identified should be addressed via personal development plans and performance reviewed at least quarterly.	 Improved personal development. Improved staff morale. Improved service delivery. Improved customer satisfaction. 	Start: In progress Finish: Q1 2015	 Management and staff time. HR support. Training. 	Medium
R-23	A view that restructuring has added another level of management but there aren't any more bodies to actually deliver work.	1. The proposed structural review of IT Services i.e. the 'Tower model' should address this issue. It is also recommended that once the current round of infrastructure investment has been completed, the number of staff supporting the BAU activities is reduced and costs associated with these activities are either used as cashable savings or redirected to reinforce resources required to deliver transformational programmes.	 A simplified structural model will facilitate the development of service catalogues for the service and for the teams within the service. Functional areas of responsibility can be targeted and monitored. Improved inter-team working can be more easily fostered. Separating functions into 'service towers' facilitates market testing and, if desired, the commissioning of service lines e.g. data hosting. Clearly demarks the service functions and promotes clarity in financial reporting. 	Start: Q1 2015 Finish: Q2 2015	IT Services management time to design and implement the tower model. If market testing is desired/required there are procurement costs associated with this process. If commissioning is adopted there would be a contract management cost.	Low



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-24	There has been a lack of IT investment over recent years that has undermined the stability and effectiveness of the IT infrastructure and estate. It has been that this under investment is more a case of not spending available funds, as opposed to funds not being available.	 It is understood that there has been a proposal to restructure the IT Efficiency Fund (ITEF). This would see the £3m of the £3.3m total budget being categorised as the IT capital budget, with the remaining £300k being used for efficiency projects. If this proposal is adopted, it is recommended that the remaining £300k should be used on a 'invest to save' basis. If this approach is adopted any proposed projects would have to first prove that the investment is recoverable through resultant efficiency gains, over an agreed period. With these facts to hand, the IT Strategy Board can decide where to allocate the money based on best return on investment. Any approved investment must be managed and monitored and agreed savings clawed back from the funded directorate/department with some savings being returned to top up the ITEF to fund further projects and any surplus returned to corporate funds. 	 Clear leadership from the Council's Members and Senior Management Team. Unambiguous understanding of the role, function and cost of IT Services. Investment decisions are open and agreed. IT Investment is prioritised at both a directorate and corporate level. A realistic and balanced budget which reflects the aspirations and desires of the organisation. 	Start: Q1 2015 Finish: Q1 2015	To be confirmed based on: 1. peer group spend review; 2. outcome of CLT's decision on the type of IT service required (i.e. BAU versus agent of change).	High
R-25	The need for an intensive period of investment, in both money and human resource has occurred at a time when both the Council and the IT service have had to implement significant spending cuts i.e. a perfect storm scenario.	1. Please see proposed SIP items at 1, 3 and 21.	1. Please see benefits at 1, 3 and 21.	As per 1, 3 and 21.	1. As per 1, 3 and 21.	High





Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-26	The lack of the formal involvement of IT Services in the specification and design of the IT elements of new initiatives e.g. CAP and the Northgate Revenues and Benefits partnership.	 It is recommended that any project requiring the use of the Council's existing IT infrastructure and/or investment in new infrastructure be subject to the involvement and approval of IT services at business case, specification, procurement, implementation and support stages. IT Services must not be a barrier to change and an escalation policy should be established to deal with any perceived lack of responsiveness or other unreasonable behaviour on the part of IT Services. 	 Congruence and strategic fit of solutions that involves investment in, and the implementation of, IT services and infrastructure. Sustainable IT investment decisions. Elimination of duplicated systems (e.g. DMS and asset management systems). Improved likelihood of successful project delivery and achievement of forecast business benefits. Improved selection of appropriate technologies and solutions. Avoidance of poor investment decisions. 	Start: Q4 2014 Finish: Q4 2014	1. Officer time.	Low
R-27	Current policies and procedures relating to procurement and recruitment are sometimes perceived to be bureaucratic and the 'one size fits all' processes are potentially a barrier to effective operations and service delivery.	 It is recommended that: the approvals process for IT investment be reviewed and the processes be adjusted to more realistically reflect the cost of IT; the approvals process for recruiting staff be reviewed and modified to reflect the skills required of a particular role and the likelihood of being able to recruit internally; a fast-track approvals process for recruiting agency/temporary staff on fixed term, market rate, contracts be reviewed to facilitate the recruitment of the same for onward sale to partner or external client organisations. 	 Avoidance of delayed investment decisions. Expedites resolution of technical issues. Improved reliability of infrastructure. Improved customer service. Ability to be more responsive to the demands of the business. Quicker recruitment timescales. Facilitates knowledge transfer. Avoiding unfilled posts mitigates against reduced service delivery. Facilitates fee-earning opportunities, which generate income for IT, Services and the Council. 	Start: Q2 2015 Finish: Q3 2015	Officer and Member time to agree and approve processes.	Low



Ref	Issue	Proposed Service Improvement Plan (SIP)	Achievable benefits	Target delivery	Investment Requirements	Priority
R-28	Low perceived value of IT Service, lack of clarity over its costs and poorly assigned ownership of those costs.	 In tandem with the move toward a 'tower' delivery model, IT budgets for discretionary spend should be devolved to directorates/departments, with clients taking ownership of allocated budgets. Carry out a staff survey to gather opinions on the success and failures of IT. Perform an analysis of the feedback and use this to inform the development of the IT strategy. Note: IT Services should be mandated as the 'preferred supplier' of IT Services, with client departments having the discretion to spend funds externally if IT Services cannot deliver projects due to either; a lack of suitably skilled staff, lack of resources or being unable to commit to delivery timescales that would otherwise jeopardise 'approved' service delivery plans. 	 Improved clarity and understanding of the cost of IT. Budgets for non-BAU activities sit within the respective departments or IT Services, as appropriate, and therefore budgetary responsibility and accountability sit with the responsible function. Improved management of IT related budgets as departments take ownership of the related finances. Budget holders take responsibility for investment decisions (including any on-going support costs). Staff involvement in the reformation of IT Services will lead to a better result and an improved perception of the Service. 	Start: Q1 2015 Finish: Q2 2015	1. IT Services management time to design and implement the tower model. 2. May require investment in reviewing finance processes and accountability.	High

Table 2-3: Issues and their respective solutions (including delivery timescale, investment and priority)



A Service Tower delivery model

A.1 The Tower Model – A new approach to the delivery of IT Services

- A.1.1 Actica's recommendation R-2 proposes restructuring IT Services into a 'Tower' service delivery model. The adoption of this model would provide clear lines of responsibility and facilitate the management and monitoring of effectiveness and accountability, with the following benefits:
 - a. a simplified structural model will facilitate the development of service catalogues for the service and for the teams within the service;
 - b. functional areas of responsibility can be targeted and monitored;
 - c. improved inter-team working can be more easily fostered;
 - d. separating functions into 'service towers' facilitates market testing and, if desired, the commissioning of service lines e.g. data hosting;
 - e. clearly demarks the service functions and promotes clarity in financial reporting.
- A.1.2 The adoption of a service tower model for ICT involves moving away from the historic trend of large, vertically integrated, organisational structures, towards an architecture where contracts and service management processes are structured around the provision of commoditised services. The Government ICT Strategy promotes such an approach, and major departments, including the Department for Work and Pensions (DWP), Ministry of Defence (MoD), Department for Education (DfE) and the Ministry of Justice (MoJ), are all either implementing or planning to implement a Tower Model in order to realise benefits over the legacy model, including improved flexibility, agility, innovation and value for money. The "Tower Model" as defined by the Government Procurement Service (GPS) can be delivered in various forms, two examples of which are illustrated, in Figure A-1 and Figure A-2 below.



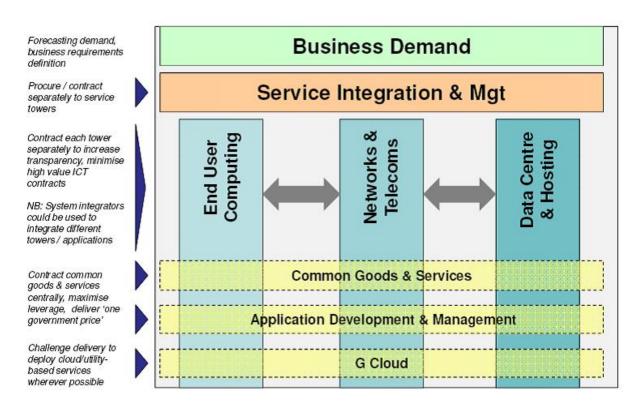


Figure A-1: Tower Model example 1

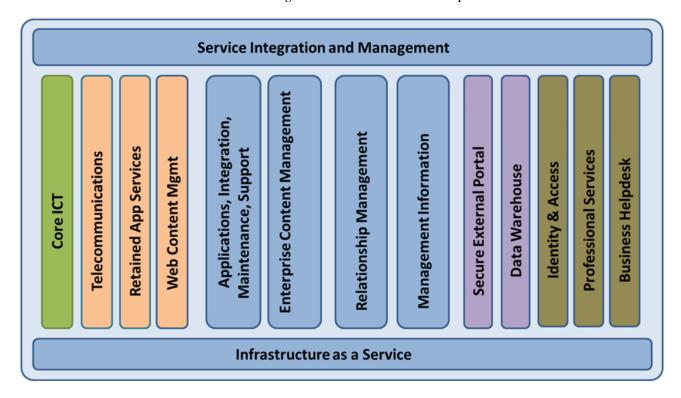


Figure A-2: Tower Model example 2



- A.1.3 A major change that arises when implementing 'service towers' is that rather than having a single supplier relationship there is a requirement to structure and manage relationships with multiple providers and/or suppliers, who must work together to deliver end-to-end services.
- A.1.4 Organisations adopting the service tower model need to establish an intelligent customer function to ensure that all service towers work in harmony with each other and with the business, are clear about their role and responsibilities and are able to contribute effectively to the achievement of business goals. The co-ordination of service providers drives the need for a clearly defined independent Service Integration and Management (SIAM) function that will align services to business demand, manage the suppliers of service components and deliver defined end-to-end services to agreed standards.
- A.1.5 The SIAM role can be delivered internally, however given the significant nature of the change many organisations feel that they lack the skills required and look to appoint an external SIAM supplier who will manage the suppliers of tower services. The SIAM supplier's role ranges from planning through implementation to on-going support. If provided externally, the SIAM provider does not itself contract directly with the suppliers of tower services.
- A.1.6 A SIAM will need to address issues which could impact on business efficiency measures including:
 - a. ensuring that the organisation has a well-developed ICT strategy and architecture together with strong standards and governance;
 - b. clearly documenting each service tower's responsibilities, including how they are expected to work with other service towers as well as the contracting organisation;
 - c. involving suppliers in key meetings with the business, individually and as a team;
 - d. monitoring the delivery of services by each tower;
 - e. providing a single point of contact and service desk to manage interaction between the authority's service users and the service suppliers;
 - f. incentivising suppliers to deliver excellence;
 - g. implementing commodity solutions and avoiding bespoke requirements, to facilitate flexibility and the swapping of standard service offerings;
 - h. retain the ability to "mix and match" industry standard offerings;
 - i. ensuring that contracts and capability are "elastic", providing a service to the level required at a point in time, and flexing up and down as required.
- A.1.7 If an outsourced SIAM model is adopted, not all of these items can be delivered by the SIAM on its own and it cannot assume all of the associated risk as it does not have a contractual relationship with the tower suppliers. For the SIAM to operate effectively and to manage the end-to-end services, there needs to be close alignment of objectives and governance between the SIAM and the customer, which flows down to the tower's component requirements and performance metrics.
- A.1.8 Achieving the desired outcomes for the use of a SIAM and the implementation of the tower model as a whole (including cost savings, the provision more flexible, responsive, efficient and customer-focused service to end users and coherence with the Government ICT strategy) requires both an intelligent customer and intelligent suppliers.

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A.1.9 Although some activities such as service catalogue management and service desk provision fall naturally within the scope of a SIAM function, other activities, such as financial management and information security, may be performed by a SIAM but are not mandatory. There is no single correct boundary of responsibility for a SIAM. Each organisation has a different appetite for transferring or retaining ownership of processes, and different skill-sets and experience in its own staff.



B Possible tower model for NCC

B.1 Proposed NCC Tower model

B.1.1 The tower structure represented in Figure B-1, which could be applied to NCC's IT Services, was developed in consultation with the Head of IT services. Boxes highlighted in red represent business functions that operate as an overhead, those highlighted in green deliver the BAU service and those in yellow are chargeable services operating on a cost recovery basis.

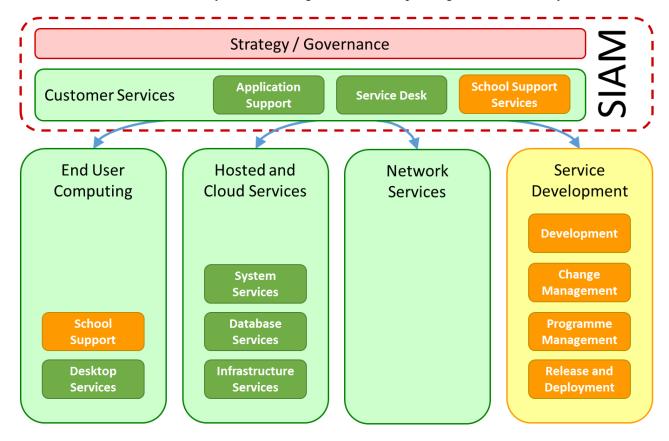


Figure B-1: Proposed NCC Tower model structure

- B.1.2 As can be seen in Figure B-1 the SIAM would consist of: the IT leadership, who would define strategy and governance and communicate this to the wider IT department; and the Customer Services, who would take on first and second line support and involve the relevant tower(s) in 3rd line support issues.
- B.1.3 Of the supporting 'towers', three are concerned with the delivery of BAU tasks (those highlighted in green), with the final tower (highlighted in yellow) concerned with the delivery of change projects as a chargeable service working on a cost recovery basis. As such, this function could be classed as 'discretionary spend'.

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B.2 Rationale

- B.2.1 If a 'Tower' structure were to be adopted, at the outset implementation would require a hybrid approach between NCC's traditional delivery and a formal 'Tower' model. This is because initially almost all of the resources used in delivery of services will be in-house; however, using the tower model in this way enables the Council to be more flexible in that should it later decide to commission services, or share resources, with other councils this will be more easily achievable.
- B.2.2 There are a number of other benefits in moving to this form of 'Tower' model which include:
 - a. greater financial transparency and granularity, this supports activity based costing for a more commercially focused IT Service;
 - b. moving the service to a more modular service supports a commissioning approach;
 - c. reduced overhead can be achieved through effective use of the SIAM function;
 - d. allowing for a redistribution of resources in favour of BAU support, making the service as a whole more viable:
 - e. the above benefits mitigate many of the issues highlighted in the first report.

B.3 Cost

- B.3.1 Following preliminary high-level workings and taking aside the cost of implementation, the 'tower' model is expected to deliver a 'cost neutral' improvement in the delivery of BAU services. This is achieved by removal of posts that will become defunct and using the money saved to cover the cost of newly created posts. Additional posts could be funded by becoming 'cost recovery roles', where work would be billable to the respective department making use of the service.
- B.3.2 Once the CLT have finalised the IT strategy (issue I-1) and decided on the future role of IT Services, it is recommended that further work is carried out to properly detail the costs of a restructure, including changes to:
 - a. headcount;
 - b. grades of existing roles;
 - c. the creation of new posts; and
 - d. the removal of existing posts.