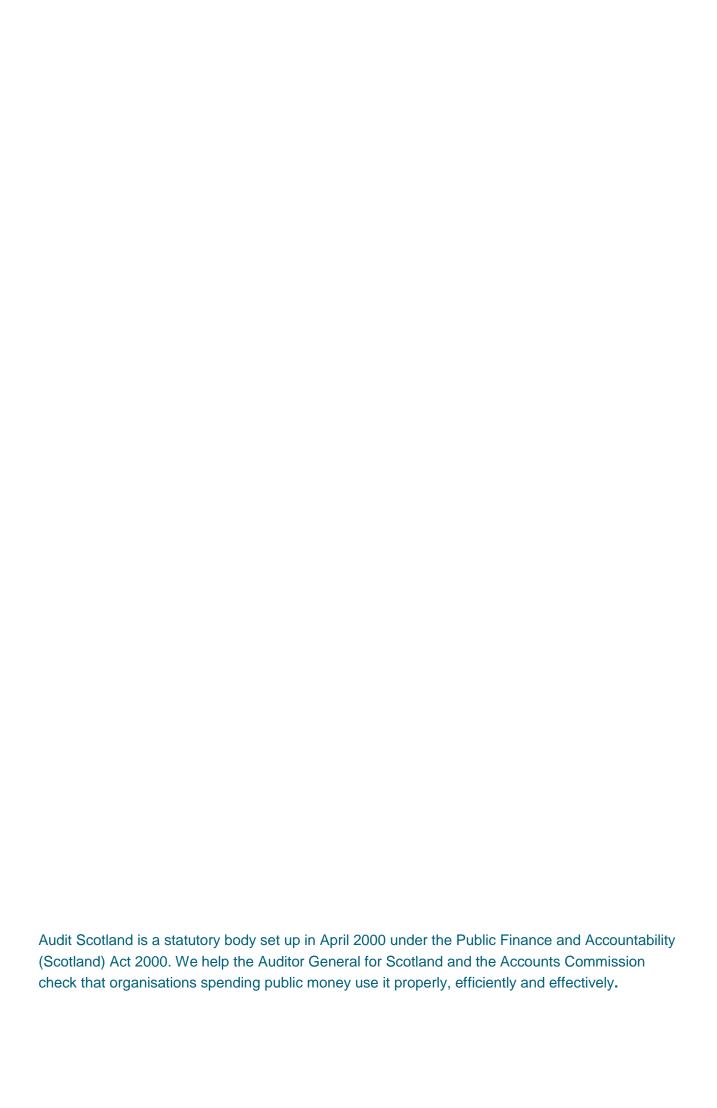
# Angus Council Supporting service improvement



Prepared for Angus Council September 2014



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# Key messages

As part of our 2013/14 audit, a review of the council's arrangements for managing and maintaining council data and information services was carried out.

We established the council has changed from storing electronic information at the point of use to centralising it in the data-centre at Orchardbank. As part of this progression, the Transforming Angus portfolio of initiatives, including the information and communications technology (ICT) stream known as Angus Digital should help support the improvement of service efficiency. Over time, the council will become more dependent on the continuous availability of digital based technologies.

As programmes and projects are delivered they will require support by staff in ICT services (or third-party providers as considered appropriate). They will also require support from information governance initiatives as the introduction of digital based services makes the management of the council's data records on citizens, finance and other resources more challenging and critical to service outcomes.

We identified a number of opportunities for improvement including:

- when digital technologies are adopted, business processes for information and records management need to be in place to ensure sources of data are reliable. The council recently published a framework for information governance led by the head of legal and democratic services and now needs to ensure that the good governance principles set out within this framework form the basis for data management across all council projects.
- the security and exchange of information is of growing importance and this has been highlighted by the introduction of the UK Public Services Network (PSN) annual accreditation process. While the council was granted a compliance certificate in October 2013, a significant programme of work was identified for delivery by the end of July 2014 which required the rescheduling of priorities and placed significant ongoing demands on council resources. We have some concern about the council's capacity to meet planned projects alongside PSN requirements.
- the introduction of 'agile working' was a key objective in the council's plans in 2012. It was difficult for the council to implement this initiative before the data centre was established and a Citrix operating environment was in place. Important steps have now been taken in this area but there is still much to be done including a substantial migration exercise to introduce dumb terminals across the council.
- the council has recently adopted a programme management framework to support
   Transforming Angus initiatives. The previous arrangements for IT project
   management had a low profile with the result that there was scope to improve the
   transparency, challenge and involvement of service-based officers in delivering each
   project.

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- the need for specialist skills to support key areas has also been recognised with the decision to appoint a strategic partner. This should assist the council in setting and monitoring priorities with a view to determining if it has the right skills and capacity to support improvement.
- the need for arrangements that support business continuity and disaster recovery continues to grow and the council has still to demonstrate that suitable procedures are in place to test and report on the viability of the services on which the council depends.

Management have agreed to take action based on the risks that have been reported. However, it is worth noting that it will take time for the outcome of these actions to become embedded in the normal day-to-day procedures and working practices of the council.

# Main findings

#### Introduction

- The use of information and knowledge is at the heart of many of the services Angus Council
  provides. Although there are important archives of paper files, most day-to-day information is
  stored in computer systems. Improving the management of information, from the point of view
  of technology, accessibility and business function is a long-running theme of the corporate ICT
  strategy.
- 2. 'Transforming Angus' is a corporate change programme which, amongst its wider corporate objectives, aims to provide more flexible working, better business processes and modern channels of communication with customers<sup>1</sup>. ICT aspects are part of the Angus Digital work stream, which has the vision of maximising the potential of digital technologies to improve outcomes and services for all the council's citizens and employees.
- 3. The 2012 ICT strategy included the goal of 'agile' working, where the physical location of staff makes little difference to the business information available to them. Until recently, information technology was relatively localised, with most electronic information stored close to the point of use. Although the ICT services provided good coverage for email and file sharing, they were not designed to support centralised storage of front-line service data or agile working.
- 4. Improvements to the council network and the building of the new data-centre at Orchardbank in 2013 changed that, and now the council's ICT provision is experiencing a time of significant change. With leadership from the council's executive directors, the Transforming Angus portfolio of initiatives is putting the governance in place to support greater service efficiency and quality, in part dependent on ICT.
- 5. This year, the corporate IT department is migrating front-line systems from local offices into the data-centre, where they should be more secure, resilient and easily managed. At the same time, services are receiving new systems that promise to deliver relevant and accurate information to officers whether in an office, or out on call.
- 6. It is clearly a time of significant activity and change and much of this report applies to a state of affairs that is in the past. We note in such circumstances that what was true in the past, may not necessarily be so in the present or the future. It is too early to evaluate the impact of Transforming Angus (TA) and its ICT stream, Angus Digital. Management action may take some time to be reflected in operational products.

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<sup>&</sup>lt;sup>1</sup> Report 13/12 to the Scrutiny and Audit Sub-committee (January 2012) Chief Executive

## Information strategy - corporate

- 7. To address the challenge of developing the information architecture for records management and data protection, in 2013 the Executive Management Team approved an Information Governance Management Framework. An Information Management Strategy is currently under development. The Public Records (Scotland) Act 2011 requires public authorities to manage their records efficiently and in line with good practice suggested by the Keeper of the Records of Scotland. Furthermore, compliance with data protection and freedom of information legislation is associated with considerable cost and risk. This is recognised in the corporate risk register, and mitigation actions include both governance and technical measures.
- 8. Effective records management provides a means of controlling the growth in the amount of information stored by the council and its employees, and for improving the accessibility and relevance of information, which links it to TA. The information governance and the TA workstreams are proceeding under different arrangements and there is a risk that synergies and dependencies are not recognised and used to advantage.

#### **Refer to Action Point No 1**

- 9. The success of TA depends upon good information management. Several TA projects are likely to be based around reliable lists of citizen names, addresses and services and will depend on the arrangements for ensuring such records are up-to-date and free from duplicates and omissions.
- 10. At present, the council's information management policies give freedom to staff to store information according to any filing structure and there are several databases with citizen names and addresses which operate independently of each other. Several TA projects are likely to depend on linkage to reliable sources of citizen and customer data and these in turn depend upon records management processes. However, records management is focused on compliance, and measures to improve record quality and information architecture across service areas have a lower priority.

#### Refer to Action Point No 2

11. Although the use of information is a common thread of the projects within TA, the proposed governance arrangements do not recognise TA's dependence on the records management work stream. There is a risk that as TA projects move forward, optimistic assumptions are made about record quality and expenditure incurred, which subsequently turns out to be short-lived as records are found to be less reliable than anticipated.

**Refer to Action Point No 3** 

## Information strategy - technical

- 12. Technical requirements are determined by the three-yearly information and communications technology (ICT) strategy cycle. The 2012 ICT Strategy is now in its final year and in the future, will be part of the Digital Angus stream of the TA Programme. Achievements of the first two years of the 2012 strategy were assessed by reviewing minutes and papers of the Capital Projects Monitoring Group (CPMG).
- 13. Projects in the current strategy include improvements to the council's ICT network, the building of a new data centre and the technical foundations for agile working. Significant progress is being made, but there is also evidence of slippage, with some projects falling behind.
- 14. The combined gross ICT capital budget in 2012/13 and 2013/14 was £3.8 million, mostly from the Repairs and Renewals Fund. However, forecast expenditure for these two years (using figures to December 2013) is only £3.3 million, with estimated total slippage of £524,000 (14%). Slippage has occurred mainly in projects that could be said to facilitate agile working, for example, improvements to the network, virtualisation of servers and desktops, and modifications to database architecture.
- 15. The 2012 ICT strategy and its implementation arrangements were technically focused, with service managers consulted and informed. When ICT strategy is technically focused, there is a risk that services are slow to adapt and adopt, so that on implementation, the technology is no longer new and benefits are less than expected. Service redesign is now being led from within services, with corporate support for change and ICT.

#### **Refer to Action Point No 4**

- 16. As stated in Internal Audit report 11-36 Review of Project and Programme Management, issued in October 2012, the council made limited use of formal project management standards such as PRINCE 2, and the governance arrangements to monitor projects were incomplete. In our opinion, while more formal project governance arrangements are now in place, they have yet to show their effectiveness in terms of reducing project risk.
- 17. Governance over the ICT strategy was provided by the CPMG at member level and by the IT Strategic Developments Group (ITSTG). The CPMG has a focus which is mostly financial while the ITSTG was technically orientated. The materials presented to the two groups at their regular meetings did not provide a full view of risks, dependencies and progress in delivering planned benefits within resource budgets and timescale.

#### Refer to Action Point No 5

18. ICT projects are managed by trained project managers who produce standard documentation to set-up, deliver and monitor each project. The projects fall under the remit of the Digital Angus programme/project board. Review of the minutes of this board, which meets monthly, show that it has a wide agenda reflecting the need for decision-making to move the programme forward. They do not however record evidence of systematic review of projects within the portfolio. For example, recent Citrix project reports show a recurring monthly

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shortfall in the time spent against plan. We would expect a programme board to question whether this means this project is at risk of falling behind.

#### Refer to Action Point No 6

19. We note the recent formation of the TA Programme Office. The TA programme board includes the Chief Executive and directors as well as Councillor Rob Murray. The Programme Office is using a methodology for formal programme management. This increases the likelihood that going forward, dependencies of the council's service plans on ICT developments will be better understood and managed. In the past, it appeared that little challenge had been provided to project managers in respect of programme governance arrangements. In our view, effective challenge and support are critical to the role of the programme board.

Refer to Action Point No 7

# **Organisational structure**

- 20. The council is unusual among Scottish local authorities in the extent that it decentralises responsibility for significant IT expenditure to service departments. For example, in 2012/13, service departments spent £2.5 million on computer related supplies and services (including major application systems) while the IT department had a corresponding budget of only £801,000. Benchmarking carried out by the Society of Information Technology Management (SocITM) using 2010/11 figures showed that only 54% of IT expenditure was controlled by Angus' IT department that year, against a median of 74%.
- 21. The freedom of services to choose and implement business systems makes it harder to implement some aspects of corporate ICT strategy. For example, the 2012 strategy aimed to reduce the number of database and software platforms in use in order to reduce support costs and make the development of agile platforms simpler. However, over the last three years, little reduction has been achieved, with progress dependent on the on-going effort to consolidate and centralise servers.

#### **Refer to Action Point No 8**

22. The IT department is structured similarly to other local government organisations, except that a procurement and contract management team is not evident. This is because significant external contracts and procurements are managed within service departments. For example, schools have a significant budget each year to purchase ICT equipment. It is possible that better value would be obtained from a central team of expert buyers and specialist contract managers within IT.

**Refer to Action Point No 9** 

23. In 2013, the Head of Information Technology and the Senior Service Manager retired, and it was decided to combine their roles into a new post, the Service Manager (Information Technology). The post was vacant for some but has been filled from 1 July 2014. The change programme has led to increasing demand for ICT services, while there are fewer staff available. At certain times of year, there may be an imbalance between work to be done and resources available.

#### **Refer to Action Point No 10**

24. The trend of reducing expenditure on 'business as usual' functions is consistent with other public sector organisations. However, the decentralised model of ICT expenditure makes it hard to measure Angus' actual ICT cost with services managing significant elements of procurement, licensing and printing costs. Where expenditure is not clearly identifiable, it is difficult to manage effectively.

#### **Refer to Action Point No 11**

25. The corporate strategy depends on the TA programme and we note the council is considering a significant investment in change management, possibly to be procured from a Strategic Partner, to support the TA Board.

## **Installation management**

- 26. Historically, the computing resources of the council were widely distributed around the county, with a PC on every desk and application servers hosted in the office most closely associated with its users. Strategically, the council is moving away from this model, with the intent to replace each PC with a virtual desktop, using Citrix technology, and to move assets into a small number of fit-for-purpose facilities.
- 27. Last year saw the successful commissioning of the new data-centre at Orchardbank. This custom-built data-centre provides a more resilient platform than the old computer rooms at the County Buildings and in Angus House. As well as providing a networking hub, the Orchardbank data-centre hosts corporate file storage and some major applications.
- 28. However, the council faces an on-going challenge to complete the migration of computer assets into the new facility. Some of the assets awaiting migration run out-of-date operating systems and are in urgent need of upgrade. The staff involved in this project are also involved in other ICT projects as well as providing technical support. We are concerned that lack of focus or dependency on the skills of key people could lead to further slippage.

**Refer to Action Point No 12** 

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# **Service delivery**

- 29. The corporate IT department maintains a catalogue of services provided, which includes scope, exclusions and targets for availability. There is an IT helpdesk and a team of service support engineers.
- 30. In 2011, the council participated in a benchmarking exercise with other Scottish local authorities. This showed that, in comparison to other authorities, the service catalogue provided for longer response and resolution times, which led to a comparatively small proportion of support calls being resolved in less than four hours.
- 31. In 2013, a follow-up survey gave some grounds for satisfaction in the availability, support and helpdesk areas, particularly in comparison with other organisations. However, compared with 2011, there were some also areas of deterioration. In particular, within the wider context of the growing gap between home and work technology, there is growing dissatisfaction with the lack of flexibility of the council's IT systems. This suggests an appetite within services for new technologies and ways of working, which may present an opportunity.
- 32. A recommendation of the 2011 benchmarking report was that user feedback is obtained after resolving each service call, and that the trend in such feedback provides a key service performance indicator. Although the recommendation was agreed by the council, resource constraints delayed implementation.

**Refer to Action Point No 13** 

# **Asset protection**

- 33. This area is subject to considerable management attention at present, with a major initiative on-going to increase the strength of ICT security arrangements. This is partly driven by the requirements of the Public Services Network (PSN), a national network that supports the exchange of information between public sector bodies. In addition, the Public Records (Scotland) Act 2011 is expected to have a significant influence on information management practices and policies over the next three years.
- 34. The information security policy was updated in 2013, but is almost unchanged from its form in November 2000. While the principles of information security are unchanged since then, it is common for modern security policies to emphasise the responsibilities of each individual and to carry a strong endorsement by senior management. The revised policy does not do this and contains large blocks of text, which make it a heavy read.

#### **Refer to Action Point No 14**

35. The Cabinet Office requirements for PSN changed significantly in 2013. Aspects of system architecture which in the past were acceptable became non-compliant and the council had a short time in which to make urgent changes. Accreditation was achieved in October 2013, although at the cost of reallocating project officers and of restricting the ability of users to log in remotely. A significant programme of work identified for delivery in 2014 was the subject of an agreed action plan.

36. In the course of our audit, we enquired about progress with the PSN action plan and the plan to consolidate ICT assets in the data centres, while rolling out virtual desktops to users. These major projects are dependent upon each other, involve significant expenditure and their monitoring arrangements appear to be inconsistent. There are strong indications that the projects are under-resourced and potentially falling behind. However, it is accepted that the TA Programme Office provides a possible way for improving oversight and governance.

#### **Refer to Action Point No 15**

37. There is a further concern over the gradual increase in the amount of unstructured data held by the council. While server consolidation is expected to lead to some house-keeping of service records, we are not aware of any guidelines for users on how to store files. A challenge of information governance is to provide a controlled environment for the creation, use and deletion of electronic information. This is not possible without mandating how and where files are to be stored, and providing suitable tools to staff.

**Refer to Action Point No 16** 

# **Business continuity**

- 38. In 2013, the council began a process of updating its business continuity arrangements. Within the framework of corporate resilience arrangements, the council has encouraged services to determine their critical requirements and dependencies. A template document ensures that business continuity plans cover every necessary area and that key points are given a high profile. Each plan contains a section to cover the loss of ICT and telephony.
- 39. The consolidation of ICT assets into a small number of data centres increases the risk that loss of function of a data centre will have a wide impact across council services and staff.

  Data centre resilience and recovery is likely to become a critical risk for the council.
- 40. The IT department have put in place a number of resilience arrangements. There are arrangements with Property Services to test what would happen if power or cabling to a data centre was cut, but we were unable to obtain evidence of the types of test and their results. There are no specific arrangements to test whether IT systems can be restored on new equipment from backup. We understand that the IT department is in the process of updating its risk assessment and recovery arrangements for the main data centre, but that this may not be completed until after server consolidation and PSN projects are complete.

#### **Refer to Action Point No 17**

41. Major service-related ICT systems, such as the financial system, social work, housing and benefits, are covered by support arrangements with third party suppliers. These include database and operating system administration and so in the event of a disaster, third parties would play an important role in the recovery. We understand that in some cases, disaster recovery is not part of the third party contract, and that assistance would be charged at consultancy rates. As far as we are aware, these arrangements have never been tested, and we would consider it essential to test system recoverability on a regular basis.

**Refer to Action Point No 18** 

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# **Appendix**

# Risk identification and action plan

Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
1	8	Information Governance and Transforming Angus are separate programmes, proceeding under separate arrangements.  Risk: synergies and dependencies may not be recognised so that opportunities are lost.	Information Governance will be included in the Digital Angus Programme as an enabler project and monitored under the programme governance arrangements.	Strategic Director Resources	31/10/2014
2	10	Several TA projects are likely to depend on linkage to reliable sources of citizen and customer data and these in turn depend upon records management processes.  Risk: records management is focused on compliance, and measures to improve record quality and information architecture across service areas have a lower priority.	The focus of records management policy and guidance will be considered as part of the work of the Information Governance Group.  The Information Governance Steering Group met on 7 August 2014 and the Records and Information Management Working Group will meet as soon as possible.	Head of Legal and Democratic Services	31/01/2015

Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
3	11	Records management falls outside the remit of the Transforming Angus governance arrangements.  Risk: delay in improving records management will hold back TA projects and lead to misallocation of resources.	Information Governance will be included in the Digital Angus Programme as an enabler project and monitored under the programme governance arrangements. A Records and Information Management Working Group has been set up.	Strategic Director Resources	31/10/2014
4	15	The 2012 ICT strategy and its implementation arrangements were technically focused, with service managers consulted and informed.  Risk: services may be slow to adapt and adopt, so that on implementation, the technology is no longer new and benefits are less than expected.	The Angus Digital Programme board will produce a digital strategy that is service driven this will be underpinned by an ICT strategy that fully supports the digital agenda.	Strategic Director Resources/ Service Manager Information Technology	31/12/2014
5	17	The CPMG has a focus which is mostly financial. Risks, dependencies and progress in nonfinancial terms are not explicitly monitored.  Risk: Committee members may not be aware of important	The remit of the CPMG will be reviewed so that it can give some attention to the non-financial consequences of project slippage. Primary	Head of Corporate Improvement and Finance	October 2014

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Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
		indicators of risk, progress and value for money that affect the capital programme.	responsibility for management of capital programmes and associated risks and accountability for their delivery will however still rest with service committees and relevant senior officers.		
6	18	ICT projects fall under the remit of the Digital Angus Programme / Project Board. This Board has a wide agenda, which includes strategic as well as operational matters.  Risk: The joint Project / Programme board has too great a focus on co-ordinating the delivery of Digital Angus, and not enough on ensuring that individual projects are adequately monitored and resourced.	The governance processes for the Digital Angus programme will be reviewed to ensure proper reporting and appropriate challenge.	Strategic Director Resources	31/10/2014
7	19	Historically, programme boards at the council have shown limited appetite to challenge project managers.  Project highlight reports present a limited picture, and this suggests that scrutiny could be more	The role of the Senior Responsible Owner (SRO) will be clarified as part of the Transforming Angus Governance regime for PPPM	Service Manager Transforming Angus	31/12/2014

Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
		demanding.  Risk: Given the demanding portfolio of projects, there is a need for robust challenge of project managers, and decision-making over prioritisation and allocation of resources.	(Project, Program and Portfolio Management). SROs will be briefed on the need to challenge project delivery where required.		
8	21	Services have a high degree of independence and autonomy in managing their ICT arrangements and systems.  Risk: the ability of the IT department to implement councilwide ICT projects is reduced because they do not control/influence relevant budgets.	The Angus Digital board will take strategic control of ICT projects and implement any recommendations arising from the review of IT budgets and charging being undertaken by CMT.	Strategic Director Resources	31/12/2014
9	22	The IT department does not have a procurement and contract management team function.  Risk: purchase and management of significant ICT expenditure outwith the ICT department carries risk of suboptimal purchasing decisions.	This will be considered as part of the Strategic Procurement Review which is running under the TA programme.	Corporate Procurement Manager	Fully implement by September 2016

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Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
10	23	Nearly a year is expected to pass between the retirement of the Head of IT and the appointment of a successor. At certain times, there may be an imbalance between work done and resources available.  Risk: while business- as-usual aspects of ICT may become more efficient over time, the change programme is now exceptionally demanding. Current leadership and resources may be insufficient to deliver corporate objectives.	Service Manager IT post now filled.		
11	24	The decentralised model of ICT expenditure makes it hard to measure the actual cost and effectiveness of ICT at the council.  Risk: where measurement is incomplete or inaccurate, management will find it difficult to exert influence or control.	It has been agreed by the Council Management Team that current arrangements for IT charging requires rethought. This will be considered, along with ICT budget responsibilities, as one aspect of the wider IT Service	Service Manager IT	30/04/2015

Action point	Refer para no	Risk identified	Planned management action Review.	Responsible officer	Target date
12	28	Individual IT staff are involved in multiple projects as well as providing technical support.  Risk: a prolonged period of fire-fighting is likely to result in the loss of experienced staff and short-term decision making.	This will considered as part of the IT Service Review.	Service Manager IT	30/04/2015
13	32	Support desk feedback is not obtained regularly from users.  Risk: without taking account of support desk statistics, IT management may not be as able to identify preventable problems and focus resources where they can improve efficiency.	This will considered as part of the IT Service Review.	Service Manager IT	30/04/2015
14	34	The information security policy neither emphasises the responsibilities of each individual nor carries a strong endorsement by senior management.  Risk: staff may be unclear or unconcerned about information security	The information security policy will be reviewed as part of the Information Governance programme. The Information Governance Strategy 2013-15 clearly states that	Head of Legal and Democratic Services	31/03/2015

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Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
		responsibilities as described in the Information Security Policy.	all Heads of Service are responsible for the information assets within their directorates.		
15	36	The PSN and infrastructure consolidation projects are dependent on each other, involve significant levels of expenditure and are not transparently monitored.  Risk: There are strong indications that these projects are underresourced and falling behind schedule. The opportunity to gain business value may therefore be lost.	PSN compliance is dependent on delivery of infrastructure consolidation projects. The council achieved a first time compliance for PSN in July 2014 and committee report 374/14 allocated the resources and authority required to complete consolidation by December 2014.	Service Manager IT	31/12/2014
16	37	An information governance regime requires mandatory standards for the organisation of electronic files. At present users have broad discretion to create new folders and stores of data.  Risk: continued growth in data volumes makes it hard to locate accurate information and impedes the ability of managers to deal	A manual files policy was approved by the Information Governance Steering Group on 7 August 2014 and naming conventions will be addressed by the Records and Information Management Working Group.	Head of Legal and Democratic Services	30/06/2015

Action point	Refer para no	Risk identified	Planned management action	Responsible officer	Target date
		with information requests.			
17	40	Data centre resilience and recovery is a critical risk. However, there are no specific arrangements to test what would happen if power or cabling to a data centre was cut and IT systems had to be restored.  Risk: the critical dependencies of the main data centre are unknown and the conditions for successful recovery are untested.	A test plan will be submitted to EMT for consideration outlining proposals for a controlled shut down and restart of the data centre during business hours.	Service Manager IT	30/11/2014
18	41	Major service-related ICT systems are covered by support arrangements with third party suppliers. These arrangements have never been tested.  Risk: without testing, the effectiveness of recovery plans is uncertain.	A notification will be issued to all service owners advising of the need to test system recovery for 3rd party systems.	Service Manager IT	30/11/2014

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