

INFRASTRUCTURE GOVERNMENT AND

Business Continuity Planning Review

Wiltshire County Council 18th April 2008

AUDIT

Contents

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Introduction

Background

In its role as a Category 1 Responder, as defined by the Civil Contingencies Act 2004, the Council's responsibilities include "maintaining plans for the purpose of ensuring, so far as is reasonably practicable, that if an emergency occurs the person or body is able to continue to perform his or its functions".

To meet its responsibilities under the Act, to continue the delivery of critical customer services and to achieve the Council's corporate goals in the event of a disruption of normal operations, the Council requires adequate business continuity plans.

The Council identified during 2007 that current business continuity plans and planning procedures required improvement. A business continuity officer was appointed within the Emergency Planning Unit in 2007 to assist in designing and implementing a new business continuity planning programme. It is in this context that this review was performed, over the period of December 2007 – February 2008, as part of our 2007/08 audit.

We acknowledge that there is an IT Infrastructure development programme ongoing at the Council. However, this review focuses on high-level business continuity management activities, and only considers key IT risks relating to business continuity where these arose during our interviews.

Audit Objectives

The objective of this review was to perform a short assessment of business continuity planning, including:

- An assessment of current planning at the Council ("now"), to identify key high-level risks to the Council;
- An assessment of the Council's proposed planning activity ("then"), to identify whether the business continuity
 planning activity the Council has proposed is appropriate to address key risks; and
- High-level recommendations to address any gaps in the Council's proposed planning activity.

The review addressed the following areas relating to business continuity planning:

- Tactical Alignment;
- Stability and Reliability;
- Processes;
- Technology Leverage;
- Results Management; and
- Human Capital.

Audit Approach

As this has been designed as a high level review, our work has been restricted to:

- Interviewing key members of staff from the Emergency Planning Unit (EPU) and Central ICT Unit (CICTU); and
- Reviewing key documents supplied by the above.

Our findings from this review will also inform our Use of Resources scored judgements audit, specifically the relevant key line of enquiry in the Internal Control theme.

Report Format

Our report is set out in line with the six business continuity planning areas above. In each section we consider the current ("now") and proposed ("then") situation, from the results of our discussions with staff and our review of the relevant documentation. We also provide high-level recommendations to address any gaps in the Council's proposed planning activity, and report and key risks arising from our work.



Executive Summary

Summary

The Council currently has a basic level of business continuity planning in place. However, this is high-level, and does not systematically identify critical processes and resources, and plans for recovery of these resources in order to resume service delivery in the event of a disruption. The current plans address some elements of a recovery strategy. However, this have not arisen from a business impact analysis, which is recognised as a key activity in good-practice business continuity management.

However, the Council has plans in place which, if implemented successfully, should address the lack of detail in its current arrangements. This will involve performing business impact analysis activities for each service, including the identification of critical resources required for each process, and developing recovery strategies. The Council's proposed approach will bring it in line with recognised good-practice. This will require considerable, detailed, and long-term input from all levels across the Council.

A business continuity policy is in draft form, and defines responsibilities for business continuity management. This policy will be a useful tool to support the planned activities. (NB: The business continuity policy has now been approved, since completion of our review).

Recommendations

We have made an number of recommendations for improvement to the proposed business continuity management activities:

Governance

- The business continuity management policy and project initiation document (PID) should be finalised as soon as possible. (NB: The business continuity policy has now been approved, since completion of our review).
- The alignment of the business continuity management function should be given appropriate consideration during the "One Council For Wiltshire" transition.
- In addition to the planned business impact analysis and development of recovery strategies, a vulnerability assessment should be performed for critical resources (human, technology, etc), to feed into the Council's risk management processes and identify risk mitigation strategies (e.g. avoidance, transference, etc).
- Business continuity performance metrics should be developed to report the progress of the planning process, outcomes of test exercises, and stakeholder feedback. This should be reported to the Corporate Leadership Team, and integrated with the corporate risk management process.
- The Council should develop a risk-based schedule for testing the business continuity plan. The outcome of tests should be reported and used as an input for continuous improvement.

Recovery Strategies

- Following the completion of the business impact analysis, recovery strategies should avoid placing reliance on the availability of single-points-of-failure for resumption of critical services.
- As part of the recovery strategy, a skills matrix should be developed to identify potential alternative resources from across the Council to assist with service delivery in the event of a disruption.

Legal

• The legal implications of sourcing alternate suppliers in the event of a disruption should be considered in the standard terms of contracts.

Key IT Risk Identified

During our high-level discussions, we identified a specific risk relating to current IT disaster recovery plans:

• If County Hall were unavailable (for example destroyed by fire), there is currently no appropriate alternative connectivity in place between remote-working ("WoW") staff and the disaster recovery site in Melksham. Outstations on the main County Hall Wide Area Network (WAN) would be able to reach disaster recovery servers in Melksham, however the current link may rapidly overload in the event of a disaster due to capacity issues. Sites which would be unable to function in the event of a loss of County Hall include libraries, some sites in Trowbridge (e.g. White Horse Business Park), and sites connecting by IPstream and NHS N3.



Tactical Alignment

What is the Council's strategy with regard to Business Continuity planning?

"Now"

The Council's strategy so far has been to develop a corporate-level business continuity plan, and supply an outline plan structure to each department to allow them to create their own plans, which they have done.

"Then"

As part of the business impact analysis (BIA), the council plans to identify processes (and their inputs and outputs) which are critical to delivering each service, and develop plans to enable each service to be resumed to a defined recovery point objective (RPO) within an identified maximum tolerable period of disruption (MTPD). This will be managed as a corporate-wide exercise (see "Human Capital" for a summary of responsibilities).

Does the strategy focus on IT Disaster Recovery Planning, which may be limited to restoring IT infrastructure at an alternative location, or does it have a more holistic business orientation, focusing on resuming all critical business operations?

The existing corporate-level plan includes some planning for basic alternate command-and-control and IT facilities. However, as no detailed business impact analysis has yet been performed to identify critical business operations, it is not possible assess whether the current plans address these.

Critical IT applications were identified and specified in the contract with the IT outsource provider, Steria, during 2006. However, these are not currently up-to-date.

The planned business impact analysis will be holistic, aiming to identify all requirements for the restoration of each service. These requirements will be passed directly to CICTU during development of the plans. The precise mechanism for this communication is to be agreed when the first business impact analysis exercises have been performed.

CICTU are developing an inventory of applications which will assist in the exercise of mapping service to IT requirements.

The Operational Working Group will be the forum to discuss cross-cutting business continuity management requirements, such as IT and estates.

Does the strategy:

- Consider business drivers, vulnerabilities and impacts?
- Prioritise risk and recovery alternatives according to a Business Impact Analysis?
- Address both IT and non-IT business processes and resources?

Has the strategy been formally defined, documented and communicated as part of the goals of Business Continuity Management?

Business continuity has been on the corporate risk register for a number of years. However, there is no clear link between the council's existing business continuity management activity and corporate goals, and the outline strategy in the current corporate-level business continuity plan requires review.

No detailed business impact analysis has yet been performed. The current specification of resource requirements for recovery has been minimal, and has focussed on establishing priority-based colour-coded teams. These are currently not clearly linked to resource requirements for resumption of services. The council's plans will be focused on effects (service disruption) rather than causes (threats), and will include plans for restoration of critical services to an agreed level (recovery point objective) within an agreed timeframe (maximum tolerable period of disruption). The council plans to perform a business impact analysis. The outcome of this will feed the development of response strategies which will address both IT and non-IT business processes and resources, and will be reviewed and approved by section management.

The council is currently developing a business continuity management policy and strategy document (currently in draft – approval is pending). A project initiation document (PID) is currently being developed to formalise the project.

Recommendation: The business continuity management policy and project initiation document (PID) should be finalised as soon as possible.



Tactical Alignment (continued)

What is management's perception of the most critical business processes (and why)?

"Now"

The Council has identified the requirement to perform a business impact analysis, and implement a joined-up approach to business continuity management, implemented by a specialist resource and working group. However, critical processes have not yet been identified.

"Then"

In the outline business impact analysis structure document, management notes that it intends to rank the importance of services in order of:

- Health/safety/welfare;
- Statutory/financial obligations;
- Key goals/impact on performance/corporate plan goals.

What is management's formal/informal assessment of the effectiveness of the Council's ability to resume business operations in the event of a disruption?

The current business continuity plans contain no detail of the critical processes for service delivery, and, therefore, of the resource requirements for resuming service in the event of a disruption.

Management reports that there has been a highturnover of staff at senior levels during recent years, which limits confidence in the awareness of the plans. The business impact analysis and development of response strategies will enable management to form an evidence-based opinion of the council's ability to resume business operations in the event of a disruption.

What is the basis of this evaluation (e.g., stakeholder feedback, experience during a previous outage)?

Management has some confidence in the current ability to respond to incidents. Volunteers were successfully called out during floods in 2007, and The Emergency Planning Unit have demonstrated their ability to manage and respond appropriately to various incidents.

N/A

Are the existing Business Continuity Management Processes adequately serving the organisation's needs?

The Council has identified that a lack of detailed analysis is preventing them from forming adequate plans at present.

N/A



Stability and Reliability

Have critical applications and business processes been identified?

"Now"

No. Critical business processes have not yet been identified. A list of critical applications exists, but requires review.

"Then"

Yes. Critical applications and business processes will be identified as part of the business impact analysis.

Have vulnerabilities and risks to critical resources been identified?

No.

Risks to critical resources will be identified through the departmental risk registers.

Recommendation: In addition to the planned business impact analysis and development of recovery strategies, a vulnerability assessment should be performed for critical resources (human, technology, etc), to feed into the Council's risk management processes and identify risk mitigation strategies (e.g. avoidance, transference, etc).

Has a formal risk analysis been performed?

Yes, at corporate and departmental levels. However this has not been oriented by service, and has been separate to the business continuity activity. Yes. Risks to critical resources will be identified through the departmental risk registers.

Have potential business impacts of disruptions been identified?

No. A detailed business impact analysis has not been performed.

Yes. Identifying impacts of disruptions is part of the business impact analysis process.

Is the business aware of what it will need to continue delivering business services?

No. A detailed business impact analysis has not been performed, and so detailed resource requirements for delivery of each service have not been identified.

Yes. Identifying requirements for continuation of service delivery is part of the business impact analysis process.

What previous business continuity tests have been performed?

Limited table-top exercise with senior management have been performed, although this was an awareness exercise rather than a test of the adequacy of plans. Current call-out processes have been tested.

A callout exercise for the red team is planned for March, with further exercises to follow.

The business continuity policy (draft) notes that exercises will be performed, both for training purposes and to test the adequacy of plans.

Were the tests successful?

The call-out process was a success. No assessment was made of the success of the table-top exercise.

N/A



Processes

Has the Council developed adequate documentation regarding business continuity processes, policies, standards and service level agreements?

"Now"

Business continuity plans exist at the corporate and departmental levels. However, these do not currently identify critical processes and resources for service delivery.

Key Risk: A Service Continuity Plan is in place with Steria, and includes detail of server ship-in arrangements with NDR (Network Disaster Recovery) and the location of a recovery site in Melksham. However, If County Hall were unavailable (for example destroyed by fire), there is currently no appropriate alternative connectivity in place between remote-working ("WoW") staff and the disaster recovery site in Melksham. Outstations on the main County Hall Wide Area Network (WAN) would be able to reach disaster recovery servers in Melksham, however the current link may rapidly overload in the event of a disaster due to capacity issues. Sites which would be unable to function in the event of a loss of County Hall include libraries, some sites in Trowbridge (e.g. White Horse Business Park), and sites connecting by IPstream and NHS N3.

Recommendation: Following the completion of the business impact analysis, recovery strategies should avoid placing reliance on the availability of single-points-of-failure for resumption of critical services.

"Then"

The Council's proposed approach is based on the business continuity management (BCM) life cycle and Business Continuity Institute's Good Practice Guidelines. Implementing this model at Corporate, Department, and Section/Service/Team level will involve:

- Gaining an understanding of the Council's operations;
- Developing BCM strategies;
- Developing and implementing a BCM response;
- Building and embedding a BCM culture;
- Maintaining and auditing a BCM.

The Council is currently at the stage where it has developed a business continuity policy, which is currently in draft, and plans to begin a pilot business impact analysis during March 2008. Operational contacts at the service-level have been identified to assist with this process.

The Council currently aims to complete business impact analyses for the County Hall site by the end of 2008.

Are the processes adequately documented, maintained and communicated to appropriate personnel?

To the extent which plans currently exist, these are documented and maintained, and available to appropriate personnel.

The Council plans to fully document the business continuity management process and plans.

Training events and periodic email newsletters and training events are planned.

Management plans to review contact details on a quarterly basis following the implementation of the Shadow Planner service during Summer 2008 (see "Technology Leverage").



Technology Leverage

To what degree does the organisation use software tools to facilitate Business Continuity Management processes?

For example:

Job flow analysis tools to identify all system components of a given business task.

"Now"

"Then"

No. Analysis tools are not currently used to identify system components of business processes.

Yes. An in-house-developed business impact analysis database is being developed to store the outcomes of the business impact analysis exercises. The Council plans to pilot this in workshops during the pilot phase (March 2008).

Automated tools for backup and recovery of critical resources.

Yes. Automated backup tools are used for the backup of critical resources. However, the list of critical IT resources requires review.

Yes. The business impact analysis will output an updated list of critical IT resources.

Document management tools to manage changes to the Business Continuity Plan.

No. The Deputy Chief Emergency Planning Officer retains master copies of plans.

Yes. The Shadow Planner tool, being implemented during Summer 2008 will restrict access to edit plans to authorised individuals, and provide backup copies of plans from an alternative third-party (web accessible) location. Training for Shadow Planner is likely to commence during April.

Other

N/A

The council is implementing new risk management software – Excelcis – as an interim solution following previous Excel-based risk registers.



Results Management

What Service Level Agreements are in place between the function chartered with Business Continuity Management, its various support organisations and other business units?

"Now"

None.

"Then"

None planned. It was noted that discussions are ongoing within the Council regarding whether there are currently any contractual restrictions over using alternative suppliers in the event of a disaster.

Recommendation: Business continuity performance metrics should be developed to report the progress of the planning process, outcomes of test exercises, and stakeholder feedback. This should be reported to the Corporate Leadership Team, and integrated with the corporate risk management process.

Recommendation: The legal implications of sourcing alternate suppliers in the event of a disruption should be considered in the standard terms of contracts.

What is the process for testing the Business Continuity Plan?

Occasional table-top exercises have been performed. However, no established long-term test process.

The business continuity management policy (draft) has been developed to include exercises for both training purposes and to test the robustness of plans.

Is the frequency of testing adequate? Do tests reflect a realistic set of scenarios?

The frequency of testing is not currently defined.

During 2008 a 5-yearly county-wide exercise is planned. Further desk exercises are also planned

Recommendation: The Council should develop a risk-based schedule for testing the business continuity plan. The outcome of tests should be reported and used as an input for continuous improvement.



Human Capital

Has responsibility for the overall development, testing and maintenance of the Business Continuity Plan been assigned to a particular individual or group?

"Now"

The Deputy County Emergency Planning Officer has been assigned operational lead for business continuity management.

The Director of the Environmental Services Department (ESD) leads on business continuity management at the corporate level.

An elected Councillor has business continuity management on their portfolio.

"Then"

In addition, a full-time Business Continuity Officer has been appointed (with some other responsibilities within the Emergency Planning Unit).

What are the individual/group's responsibilities for coordinating the planning, testing and execution of the Business Continuity Plan?

Operational responsibilities of the Emergency Management Team in the event of a disaster are outlined in the current corporate-level business continuity plan, however this does not include thorough detail of the involvement of all parties in the development of recovery strategies. Responsibilities are defined in the business continuity policy (draft). They include, but are not limited to:

- Lead Officer: Director of Environmental Services Directorate;
- Member Leadership: Cabinet Member for Environment, Transport and Economic Development.
- Corporate Leadership Team: Responsible for consistent application of BCM policy across directorates and championing BCM.
- Department Directors: Responsible for operation, implementation and embedding of policy within departments.
- Departmental BC Representative: Responsible for development, implementation and maintenance of department BC plans.
- BC Steering Group: Comprises Departmental BC Representatives.
 Focuses on consistent implementation of BC strategy in department plans. Chaired by the Deputy County Emergency Planning Officer.
- Assistant Directors: Responsible for overseeing the development, implementation and maintenance of section plans.
- Group/Team/Service Area leaders (third-tier officers) responsible for developing, implementing and maintaining section plans, ensuring that staff members are familiar with roles and responsibilities.
- Section Officer: To liaise with the Emergency Planning Unit BC Officer for coordinating the preparation of a detailed section plan (requires detailed operational knowledge).
- All Staff: To provide job-related information as necessary.
- Emergency Planning Unit: To oversee the BCM process in its day-to-day
- BCM Officer: Main focal point for all BCM matters.
- Operational Working Group: To support the BC officer on operational cross-cutting issues affecting the BC strategy.



Human Capital (continued)

What is the relationship between the group responsible for coordination of Business Continuity Management activities and the support of other business functions?

"Now"

The Emergency Planning Unit is one of the Council's departments which also provides front-line services.

"Then"

It has not been determined where the business continuity management function will sit after the "One Council For Wiltshire" transition.

Recommendation: The alignment of the business continuity management function should be given appropriate consideration during the "One Council for Wiltshire" transition.

How do the various business functions interact to understand relationships between business processes?

- Ad-hoc meetings of the business continuity working group; and
- Deputy Council Emergency Planning Officer attendance at quarterly corporate leadership team (CLT) meetings.

See responsibilities (previous page).

The Council recognises there is the potential for crossutilisation of resources in the development of recovery strategies.

Recommendation: As part of the recovery strategy, a skills matrix should be developed to identify potential alternative resources from across the Council to assist with service delivery in the event of a disruption.

How do they use this information to develop and maintain the Business Continuity Plan?

A template plan is provided to directorates for completion.

Meetings with Section Officers will be used to perform the business impact analysis process and develop section plans.

The Operational Working Group will be used to resolve corporate-level issues, such as IT, estates, etc.



Action Plan

Recommendation	Priority	Benefits	Response	
Governance				
The business continuity management policy and project initiation document (PID) should be finalised as soon as possible (page 4).	High	Confirmation of sponsorship, acting as leverage for implementation.	Agreed: Yes. Comments: Policy document approved on 6 th March 2008. PID in progress. Delay in approving policy document delayed PID. Responsibility: DCEPO Target completion date: 1 st May 2008	
The alignment of the business continuity management function should be given appropriate consideration during the "One Council For Wiltshire" transition (page 11).	Medium	Mitigation of risks of business continuity management activity "stalling" during and following the transition.	Agreed: Yes. Comments: The implementation of Shadow Planner will enhance the capability of transferring staff information/plan information to the new authority. Once the proposed new structure is published it will be possible to decide upon alternative locations and the strategy to address infrastructure points of failure. Responsibility: N/A Target completion date: 1st April 2009	
In addition to the planned business impact analysis and development of recovery strategies, a vulnerability assessment should be performed for critical resources (human, technology, etc.) to feed into the Council's risk management processes and identify risk mitigation strategies (e.g. avoidance, transference, etc) (page 6).	Medium	Identification of risks to critical resources, and opportunity to use information gathered during business continuity management activities to further inform the Council's overall approach to risk management.	Agreed: Yes. Comments: Links with the Risk Management Group are well established. A risk officer has recently been appointed and the risk management process has been revised. The DCEPO and EPO BCM sit on the operational risk management group. Responsibility: EPO BCM Target completion date: 1st December 2008 (details will emerge during completion of BIAs).	
Business continuity performance metrics should be developed to report the progress of the planning process, outcomes of test exercises, and stakeholder feedback. This should be reported to the Corporate Leadership Team, and integrated with the corporate risk management process (page 9).	Low	Tracking the benefits, reporting progress, and obtaining stakeholder feedback on the business continuity management programme.	Agreed: Yes. Comments: See comments above. Part of the PID will include work streams to incorporate these activities. Responsibility: DCEPO Target completion date: 1st September 2008	
The Council should develop a risk-based schedule for testing the business continuity plan. The outcome of tests should be reported and used as an input for continuous improvement (page 9).	Low	Obtaining early sponsorship for business continuity testing activities, linking frequency of testing with impact of failure.	Agreed: Yes. Comments: A formal system for evaluating exercises and implementing lessons learned will be implemented as section plans are completed. Responsibility: BCM Steering Group. Target completion date: 1st September 2008	



Action Plan (continued)

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Recommendation	Priority	Benefits	Response		
Recovery Strategies					
Following the completion of the business impact analysis, recovery strategies should avoid placing reliance on the availability of single-points-of-failure for resumption of critical services (page 7).	Medium	Increasing the likelihood of successful resumption of critical services following a disruption.	Agreed: Yes. Comments: The potential for single points of failure will be covered in the BIA of each service. For example all key posts will require nominated deputies to be highlighted. When the unitary council is in place it will increase the flexibility to relocate staff within the increased infrastructure. Responsibility: EPO BCM Target completion date: 31st March 2009		
As part of the recovery strategy, a skills matrix should be developed to identify potential alternative resources from across the Council to assist with service delivery in the event of a disruption (page 11).	Low	Increasing the efficiency of resource allocation in the event of a disruption, and improving awareness of the Council's skills base.	Agreed: Yes. Comments: With the reorganisation of HR it proved difficult to obtain a skills audit of current staff. The BMP programme will make it easier to obtain this type of information which will enhance the amalgamation of the 5 councils to one unitary authority. Responsibility: Shared Service Team. Target completion date: Autumn 2009		
Legal					
The legal implications of sourcing alternate suppliers in the event of a disruption should be considered in the standard terms of contracts (page 9).	Medium	Avoidance of legal action or financial penalties in the event that terms of contract are breached during a disruption.	Agreed: Yes. Comments: The main suppliers to WCC have been approached to confirm they have plans in place to improve their own resilience. There will need to be a programme to include all suppliers. Identifying specific suppliers used by departments will emerge during the BIA process. The Procurement department have systems in place if a business interruption is caused by a non-performing contract. Contract regulations also allow procurement up to OJEU limits and remedies such as termination and re-tendering. All decisions are taken in conjunction with Legal services. Responsibility: DCEPO Target completion date: October 2009		

