Somerset County Council Audit Committee - 23 September 2010 Paper E

Business Continuity and Disaster Recovery

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1. Summary/link to the Annual Plan

- **1.1.** It is a requirement under the Civil Contingencies Act 2004, that SCC puts in place and maintains business continuity management arrangements. Business Continuity Management is defined as 'a holistic management process that identifies potential impacts that threaten an organisation and provides a framework for building resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, and activities.'
- **1.2.** SCC has recognised the importance of business continuity planning by including it in the Corporate Strategic Risk Register. In the register it states Corporate Strategic Risk 16: "Because of the lack of formal arrangements in place or being finalised that enable managers to identify, evaluate, manage and review risks in the planning for business continuity, there is a risk that short or long-term service disruption may occur. This could result in major disruptive challenge to service provision, unplanned additional costs and at worse death of service user, member of the public or staff member."
- **1.3.** Overall, good progress has been made in putting in place appropriate business continuity arrangements and the progress made by services should be acknowledged. Corporate and service level business continuity plans have been written and tested but are not yet complete for every Directorate. South West One has completed plans for its services except for Property Services/Facilities Management, which are still in development.
- 1.4. However, one specialist area, Disaster Recovery, requires further consideration. For clarity: business continuity is about maintaining the council's essential services in the face of disruptions such as loss of premises, loss of staff or loss of communications and information technology. Disaster recovery is the restoration or replacement or rebuilding of infrastructure, particularly communications and information technology, after a natural or human-induced disaster. As Information technology, communications and premises management functions are delivered for SCC by SWOne; disaster recovery is now undertaken by SWOne and is the subject of contractual arrangements.

2. Issues for consideration

- **2.1.** Completeness of existing controls and level of planning and preparation for business continuity.
- **2.2.** Scope and adequacy of the disaster recovery arrangements between SWOne and SCC.

3. Background

Business continuity

- **3.1** Although arrangements to deal with service interruptions have been in place for many years, particularly for IT and premises issues, and much work was done in the run up to the millennium, business continuity planning in its current form started in SCC in 2006 with a project led by the Civil Contingencies Unit (CCU) to develop pandemic influenza business continuity plans. This work developed into the existing corporate project to write service and group levels plans for key SCC services. A list of completed and in-progress plans is attached at Annex A.
- **3.2** Governance of business continuity occurs at several levels: Corporate Director, Environment is the corporate champion for business continuity. Environment Directorate Management Team (DMT) owns the corporate business continuity risk and reviews it each month. The officer level Civil Contingencies Co-ordination Group (CCCG) is made up of representatives with civil contingencies responsibilities from every directorate. The CCCG keeps business continuity process under review and makes recommendations to DMT.
- **3.3** Control measures for business continuity planning and preparation are led and coordinated by the CCU. Measures include common formats for business impact assessments and templates for service level plans. The CCU provides advice and support to service areas for plan writing. Since December 2009, the CCU has been helping service areas test and validate their plans by running short table-top emergency exercises (Exercise Hart). The CCU maintains the corporate level plan and shares good practice after incidents.

Useful learning and good practice were gained from the 2009 swine flu pandemic which will inform future planning. It is noteworthy that the Community Directorate in particular carried out much work with domiciliary care providers after the snow in February 2009 as a result of which the care providers were much better placed to deal with the extended period of snow in January 2010.

3.4 To promote consistency of approach to business continuity across Somerset, the CCU provides advice and support to the Districts to assist with the development or testing of their internal business continuity plans.

3.5 In general, officers consider that the internal business continuity arrangements are progressing well, with a timetable in hand for the completion of service level plans, the establishment of an exercise and testing process and recent experience of real incidents. All these factors have helped raise awareness of staff of the importance of business continuity, although work remains to be done and plans and process will need to be kept under review and will need to be refreshed periodically and when circumstances change.

Although there were some early concerns about the level of engagement of Southwest One, these have been addressed, with the completion of plans for all SWOne services with the exception of Property/Facilities Management, which is under development.

Disaster recovery

3.6 Historically the Council maintained disaster recovery arrangements for two of its IT systems; Payroll and Finance. In the event of a disaster e.g. fire, flood etc, the systems could be rebuilt from back-up tapes on similar equipment located at a third party site. It was essentially an insurance policy but in reality there were many contracts issued by the third party for the same equipment so ultimately it would only be available on a "first come first served" basis.

Both these systems have been replaced by SAP which is located at IBM's Data Centre in Warwick. Whilst there are no formal disaster recovery arrangements for SAP, the system is built within a resilient data centre. Critical system components are duplicated such that there is no single point of failure and therefore higher levels of availability are automatically enabled. In addition the Data Centre environment is built to a higher standard than its equivalent at County Hall which further reduces the risk.

To date, SWOne have not provided SCC with a formal Disaster Recovery Plan (though we have a contracted obligation upon them to do so), though SWOne do engage with the Authority in terms of Business Continuity planning under a formal contracted Schedule.

3.7 It is important to note that SCC have not 'purchased' through the SWOne contract a level of disaster recovery which would provide for seamless ICT service continuity in the event of primary system failure (for example by implementing a 'parallel' server system). Rather, service delivery is safeguarded through contracted penalties which apply in the event of Key Performance Indicator failures, such as those covering 'system availability'. This mechanism is designed to ensure that SWOne treat system recovery as a priority after events of failure, which experience demonstrates has been the case.

4. Implications

- **4.1** IT dependency is high for most SCC services. Services have been instructed to draw up business continuity plans, taking into account for each activity the Maximum Tolerable Period of Disruption (MTPD), by which time the activity must be recovered in order to prevent unacceptable impacts in terms of welfare/safety, regulatory requirement, reputation, finance, environmental damage or unmanageable backlog of work. The purpose of such plans is to inform disaster recovery arrangements and to assist the organisation in prioritising recovery actions. Therefore it is important that disaster recovery arrangements are informed by this work; ideally this would be through a disaster recovery plan. A lack of clarity over disaster recovery arrangements increases the risk that services' existing plans are either insufficient or based on false assumptions and this will lead to service failure.
- **4.2** Recovery from IT problems can be speeded up or made easier with investment in back-up systems etc and SWOne has access to considerable expertise in this area. However, the benefits of comprehensive backup systems and procedures needs to be balanced against the investment needed in systems and processes that might never be required.
- **4.3** In terms of network availability to remote sites around Somerset (including schools), a project to replace the existing 'Somernet' infrastructure with a more, faster and more resilient network which moves away from single points of connection failure (as is the current network design) Is nearing completion. This considerable investment will be at no extra cost to the County Council or its' schools partner sites.
- **4.4** Following discussions with SWOne colleagues, it is proposed that the SCC Client Team works with SWOne to produce a report setting out the options for increasing the current disaster recovery arrangements as part of the delivery of a formal Disaster Recovery Plan.

5. Background papers

5.1 Annex A - list of completed and in-progress plans.
Annex B – lessons identified in recent business continuity episodes.

Annex A

Current Generic Business Continuity Plans As at 15.9.10

CORPORATE LEVEL

Final draft SCC Generic Corporate Business Continuity Plan, now incorporating updated Corporate Pandemic Influenza Business Continuity Plan as an appendix

SERVICE/GROUP LEVEL

Environment

Complete Highways, Traffic Management, Transport Development, Strategic Planning, Environmental Management, Environment Resources, Trading Standards, Scientific Services, Business Development, Business Transformation, Transporting Somerset

Children & Young People

- **Complete** Education Development Team
- Draft Youth Offending Team, Special Educational Needs & Educational Psychology, Elearning & Info Management, Planning & Admissions, Building Schools for the Future, Children's Social Care, Residential, Early Years & Childcare
- Out of ScopeSomerset Activity & Sports Partnership, Youth
Service, Joint Commissioning, Localities, Extended School
Service
- **Issue:** Due to a major restructuring exercise, an interim Directorate plan is being developed. Once structure has bedded in, service level plans will be written (First Quarter 2011?)

Community

- Draft Learning Disabilities, Adult Social Care Providers
- *Out of Scope Community Regeneration*
- **Issue:** Workshop being arranged in April for Adult Social Care partners to improve their plans. Adult Social Care, Partnerships Teams first draft due end May 2010.

Resources (Retained)

Complete Communications & Marketing, *Legal Services, Finance (with SW1), Registration Services

Southwest One

- **Complete** Finance, Payroll, Design & Print, HR, Customer Contact, Technology Services, Procurement
- Draft Facilities Management/Property Services
- Issue: No disaster recovery plan for any IT systems No training programme scheduled

Somerset Districts

Sedgemoor	Own plan complete & exercised
West Somerset	Draft plan and exercise held in March 2010
Taunton Deane	Assistance offered, Project ongoing, completion Sept 2010
Mendip	Own Plan complete. Exercise March 2010
South Somerset	Own plan complete. Exercise not known

Annex B Lessons identified from recent business continuity episodes

February 2009 & January 2010 – extensive snow

Salt/Gritting

Somerset Highways maintain approximately 10-12 days supply in stock. Their situation through the event was better than other South West authorities, but this meant that Somerset was low priority in the Government's 'salt cell' list for restocking, so Highways were unable to provide an enhanced gritting service away from main highways or supply salt to schools.

4x4 capability

The February 2009 snow showed the dependence of domiciliary care providers on 4wheel drive vehicles to reach their clients who live off normal gritting routes.

Extensive use was made of Wessex 4x4 Response, a voluntary organisation comprising owner/drivers of 4WD who give their time unpaid (apart from fuel costs). However volunteers soon become overstretched due to fatigue and the need to attend their day jobs. Other 4WD vehicles were identified including Transporting Somerset.

Snow disruption was experienced again during the first 2 weeks of January 2010. The snow was more widespread through the county than during the previous February. Overall, care providers appear to have learned the lessons of 2009 and were much better prepared to cope with the conditions from within their own resources.

Command & Control

Neither the SCC County Emergency Response Plan nor the Corporate Business Continuity Plan was invoked. The County Emergency Response Team was due to meet but was stood down due to improving conditions.

Conclusio**n**

SCC handled this event on a 'business-as-usual' basis: emergency plans were not invoked; and responses were provided from within existing resources. This was an improvement on the previous February and showed that lessons had been learned.

2009 Pandemic Influenza

First cases appeared in the UK in May 2009. Government planning assumptions required SCC to plan for staff absence rates of up to 50% at the peak of the pandemic.

Command and control

SMB activated the corporate pandemic flu business continuity plan in July. Other actions included a daily monitoring and reporting procedure for staff absences, a communications channel for staff messages. The Emergency Management Team (EMT) met fortnightly.

Cleaning & communications

Facilities Management set up enhanced cleaning arrangements for County hall and local managers made appropriate arrangements in the local offices. Communications Team set up a swine flu micro-site to provide information to staff.

Business continuity lessons

Vaccination of front line social care staff was arranged. Human resources policies concerning staff absences were revised and re-issued. These needed to be cover TDBC and SWOne staff as well as SCC staff.

Conclusion

In the event, the impact pandemic was much less severe than it could have been (staff daily absence numbers never rose above 113) but it was a useful test of business continuity processes.

2010 County Hall Power Failure (May 2010)

On the 24th May at 11:45am, Taunton experienced a power outage during which power to the whole of County Hall was lost. The ICT Data Centre which is the main hub for County Hall's entire ICT infrastructure should have been protected via the Uninterruptible Power Supply (UPS) and the on-site Generator supply. However, the UPS failed to take the load once power had been restored by Western Distribution and all power to the SCC Data Centre was lost and consequently resulted in all IT services housed within and provided by the SCC Data Centre becoming unavailable. The Taunton Deane Borough Council Data Centre did however revert to the UPS, and as a result IT services were maintained.

Client Services and the Corporate Communications team working on the advice from SWo ICT ensured that all area offices were notified of the power outage and impact to our IT services, along with ensuring communications were passed to all staff within each Directorate of County Hall to notify and make them aware that all ICT support teams were working to restore service in a controlled and phased approach for the remainder of the day to bring the network, its servers and all applications back online.

Following this incident, Client Services have taken steps with Southwest One to ensure that arrangements are in place to prevent this incident occurring in the future in line with the contract provisions.