

Report to: **Audit and Best Value Scrutiny Committee**

Date: **20 November 2008**

By: **Deputy Chief Executive and Director of Corporate Resources**

Title of report: **Progress Report – The Main Controls Around the ESCC and SERCO SAP Transport Process**

Purpose of report: **To provide the Committee with an update on the progress against the recommendations contained in the Internal Audit Report dated 21 May 2008.**

RECOMMENDATION: The Committee is recommended to note the progress made.

1. Financial Appraisal

1.1 There are no direct financial consequences as a result of this report.

1.2 SAP is the key back office business system used by the County Council. The hardware and software is managed on the Council's behalf by SERCO under the CBOSS contract. A sound and controlled transport process is an essential element to ensure that the availability and integrity of the system are maintained. Errors or lack of system availability could have significant financial consequences.

2. Background

2.1 A SAP 'Transport' is the process of transferring a software change from one version of SAP to another. For example a new payroll routine for the calculation of National Insurance contributions could be developed in the development version of SAP then be transported to the test version for testing and finally transported to the live (or production) for use.

2.2 Every change to the SAP software involves a transport and hundreds of transports into the live system are required every year. If these transports are not correctly applied and in the correct order, they can generate errors and have unexpected consequences.

2.3 In May 2008 Internal Audit reported on "The Main Controls Around the ESCC and SERCO SAP Transport Process 2007/08." The audit examined the transport process reviewing four key control objectives:

- SAP client transports are only introduced into the appropriate SAP QA client for testing, after formal approval has been given by the relevant ESCC Stream Manager and the Corporate Systems team, and satisfactory testing has been performed by SERCO in the Development version of SAP.
- SAP client transports are only introduced into the Production (Live) SAP client, after the change has been properly and comprehensively tested in the relevant QA client and the relevant Stream Manager and Corporate Systems have authorised/approved the particular change.
- The "workflow" of transports into the particular SAP client, is managed so as to ensure that transports are implemented in accordance with ESCC priorities.

- SERCO's contractual obligations and financial liabilities, are understood by all parties and can be invoked appropriately, in the event that they implement transports incorrectly.

2.4 The audit concluded that the internal controls in place were weak, in particular:

- The adoption of differing testing practices by the various "streams" means that it is not always possible to determine whether adequate testing has been carried out;
- A lack of clarity between the Council and SERCO, as to the various responsibilities in the testing process. This increases the risk: that changes are introduced without sufficient testing by the service provider; of uncertainty as to the exact tests carried out; and ultimately that a transport will have an unforeseen impact elsewhere in the control environment;
- Inadequate control over the "sequencing" of transports by the service provider.

The audit report recommended a number of improvements. This report provides the Committee with an update on progress against each recommendation.

2.5 Since the audit took place there has been a major project to upgrade both the hardware used for SAP and the SAP system software. This upgrade has required extensive testing of SAP to ensure that the new software (ERP6) is operating correctly and with the same internal controls as the old software. I am pleased to inform the Committee that the upgrade has been very successful and the Council has been operating on the upgraded system since 06 October 2008.

2.6 The upgrade project has also provided an excellent opportunity to ensure that testing procedures and test scripts are working correctly and are up to date. The upgrade has also resulted in a system development freeze being applied and that freeze has been extended until all the recommendations in the SAP transports audit report have been addressed to my satisfaction.

2.7 The appendix to this report sets out the audit report recommendations in the form of a management action plan together with their status at the time of writing this report. An oral update will be provided for the Committee of any further progress since this report was written.

2.8 Members can be reassured that good progress has been made in addressing the deficiencies highlighted by the audit report and I will not be lifting the development freeze (which would significantly increase the number of transports) until I am satisfied that sufficient progress has been made. I have also agreed with Internal Audit that a full follow up review will be carried out shortly.

SEAN NOLAN
Deputy Chief Executive and Director of Corporate Resources

Contact Officer: Richard Hemsley Tel No. 01273 481820

BACKGROUND DOCUMENTS

ESCC Internal Audit Report

5.0 MANAGEMENT ACTION PLAN

Internal Audit Report for Corporate Resources Directorate on the Main Controls Around the ESCC and Serco SAP "Transport" process - 2007/08.

Para. Ref.	Recommendation	Priority	Status as at 22 October 2008
5.1	<p>A Testing Proforma be initiated within Serco and should accompany a change as it is transported from the Development into the QA client.</p> <p>The Testing Proforma should be filled in as appropriate by the Serco Consultant in the Development client and by the ESCC Stream Manager or their deputy in the QA client. The Testing Proforma should be returned to Serco (copy retained by ESCC Corporate Systems) at the point that authorisation is given for the relevant transport to be made into the SAP Production client.</p>	**	<p>A new approach was adopted for user acceptance testing as part of the SAP upgrade work. This involved a new testing proforma. Extending this new approach into "business as usual" is currently in discussion with SERCO and agreement on a new approach which meets these recommendations is a requirement for lifting the post upgrade freeze. It is expected that this new approach will be in place by end November 2008.</p> <p>31/10/2008 – Peter Collier comments: I have asked Serco whether this proforma already exists and if so, can we have it appended to the transport form at submission. If it does not already exist there will need a wider discussion but I don't think this should prevent us putting the transport process back into BAU. I have discussed with Gareth Smith from Internal Audit.</p>
5.2	That roles, responsibilities and standards of testing are agreed formally between Serco and ESCC.	***	<p>The new approach has been set out in overview (see the attached flowchart) which clearly shows the division of responsibilities for ESCC stream owners, ESCC ICT corporate systems team and the SERCO consultant/approver. This new approach is expected to be agreed with SERCO and formally launched, along with the testing proforma (see 5.1 above) in November 2008.</p> <p>06/11/2008 – Peter Collier comments: Serco have</p>

Para. Ref.	Recommendation	Priority	Status as at 22 October 2008
			responded with a positive reply and just asked for some small points of clarification. I have revised the flowchart and returned it to them asking for a clear acceptance that this is what we will now work to.
5.3	A workshop should be arranged to include ESCC Stream Managers and representatives from Serco, in order to determine an appropriate way forward regarding the testing carried out by Serco and that carried out by ESCC as part of "business as usual" arrangements. As part of this workshop, the use of testing tools and scripts should be considered, in order to assist with the testing process. In order to minimise the instances where changes introduced do not work when tested by ESCC, consideration should be given to enabling Serco to perform their testing using the same roles as used by the ESCC testers.	***	This workshop is due to take place in November 2008. 06/11/2008 – A date needs to be agreed for this, however there is currently an activity to ensure that all transports that were in the system pre-upgrade are accounted for.
5.4	The Transport Forms used as part of the transport request process should include sufficient detail as to why the transport is needed, or a link back to the original problem and any reference numbers used as part of problem reporting or the change request process.	**	The new transport forms have been produced and are currently being formally agreed with SERCO. They will form part of the new approach launch workshop (see 5.3). 31/10/2008 – See answer to 5.2 above. There were no comments on the transport forms themselves.
5.5	Serco consultants should be provided with a list of ESCC Stream Managers from whom formal authorisation must be obtained in relation to any Transport request. This list should be updated and re-issued to Serco from time to time.	**	The list of stream managers has been compiled and provided for SERCO. It will be kept up to date. 31/10/2008 – This is done and will be kept updated.

Para. Ref.	Recommendation	Priority	Status as at 22 October 2008
5.6	In order to improve the efficiency of the SAP Transport process, minimise errors and provide meaningful information to accompany a transport request, the electronic workflow-based transport approval process should be introduced as soon as possible.	**	This recommendation is about replacing the proposed SAP transport control process (as set out in these recommendations) with one which uses SAP generated electronic workflow messages and online approvals. This is a good long term and discussions with SERCO have taken place. This will be further explored once the previous recommendations have been fully actioned but may have significant costs with few real control benefits.
5.7	For Business Continuity reasons, Deputy Stream Managers should be assigned across all streams (where they have not already been assigned) so that they may authorise transport requests and perform testing in the absence of the Stream Manager. The assigned Deputies should be trained in this role and the list of Deputies periodically supplied to Serco so that transport requests can be easily supplied to the Deputies as required.	**	<p>06/11/2008 – List of Stream Leads and Deputies:</p> <p>Bob Golby-Ross Sutton (FI) Tim Allan-Doug Tribe (BI) Steve Wickham-Kelly Widdop (HR Payroll) Janyce Danielczyk-Jan Kavanagh (AP/AR) Teresa Marini-Lisa Moor (Systems Administration) Pete Collier-Teresa Marini (Interfaces) Helen Elliott-Sukit Pachasiri (PSU) Helen Elliott-Llana Craig (BWP) Dave Attwood-Matthew Powell (Property) Helen Johnson-Adams-tbc (not live yet)(ESS/MSS) Adam Ford-Maria Sanchez (Projects) Adam Ford-Neil Foley (Finance Projects) Chris Andrews-John Ross (EBP/Procurement) Stefan Danielczyk-Phil Barham (CRM)</p> <p>Additionally, Helen-Johnson Adams has drafted a brief DMT template report entitled “SAP Stream Managers And Deputies – Upskilling” which is now being reviewed. This sets out a proposal to address the up-skilling required and succession planning in each Stream to formalise the ‘Deputy’ role.</p>

Para. Ref.	Recommendation	Priority	Status as at 22 October 2008
5.8	That Corporate Systems are given the facility, as soon as possible, to check that only ESCC-authorized transports have been introduced into Production.	**	This recommendation is fully implemented. A spreadsheet is being used to keep track of transports introduced into Production.
5.9	As part of a workshop held between ESCC and Serco representatives, appropriate controls should be agreed (including controls within Serco) in order to minimise the risk that transports are not introduced in the correct sequence.	**	This audit recommendation was not originally accepted but further discussions with SERCO are underway to see what procedures and controls can be introduced to minimise risks of transports not introduced in the correct sequence. 31/10/2008: – Transport forms contain a field for all transports to be listed in the order that they are required. The real risk here is human error in actually loading the transports so this is about minimising the risk rather than eliminating it.
5.10	Arrangements between ESCC and Serco should be reviewed, to ensure that appropriate redress is available to ESCC in the event of Serco's failure to perform correct transports into the QA client(s) in line with expectations, leading to a disruption to ESCC's business. In support of this, a Systems Administration RAG (Red Amber Green) Analysis should be considered, for discussion with Serco at service meetings.	**	Whilst avoiding errors occurring is more important than seeking redress when they do the spirit of this recommendation is accepted. The reality is that the existing contract with SERCO already enables service credits to be applied if certain key indicators (e.g. service availability) are not met. Discussion of service performance takes place through monthly Service Level Review (SLR) meetings with SERCO as part of the ongoing process of contract management. Issues round performance on transports would be raised at that meeting – a separate RAG is not required and that suggestion is not accepted.

Priority Rating: *** Requires immediate attention
 ** Of concern, requiring attention as soon as possible
 * Minor, requiring attention as soon as possible

