

**THREE RIVERS & WATFORD SHARED SERVICES JOINT COMMITTEE**

**Date of Meeting – 23 January 2012**

PART A

AGENDA ITEM

**5**

**Title:** ICT - UPDATE  
**Report of:** Avni Patel – Head of ICT

**1.0 SUMMARY**

1.1 This report gives an update on the infrastructure project and progress on the options for future ICT service provision.

**2.0 RECOMMENDATIONS**

2.1 That the contents of the report are noted.

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**Report approved by:**

David Gardner, Director of Corporate Resources & Governance – Three Rivers D.C.

Tricia Taylor, Executive Director, Resources – Watford B.C.

## 3.0 DETAILED PROPOSAL

### 3.1 Infrastructure Improvements

The 12 week infrastructure improvement programme was initiated in mid-October in line with a detailed project plan and highlight reports outlining progress being sent to the Joint Management Board fortnightly.

This programme was communicated to both councils via the intranets, the staff magazines and email.

This programme consists of 7 work streams covering both councils and is on target for completion by 20<sup>th</sup> January. A summary of work being undertaken and progress up to week 10 of the 12 week programme is detailed in sections 3.1.1 to 3.1.7.

#### 3.1.1 Work Stream 1 (WBC & TRDC) - Network audit & documentation

This work stream is essential for ensuring that all key network services are identified and understood, therefore allowing troubleshooting to be more efficient and site knowledge to be retained.

- Network discovery phase completed. This included floor walks, asset tagging and the creation of a detailed diagram covering both councils and satellite site network connections.
- Monitoring server and software installed, network devices reconfigured to communicate with monitoring system and testing in progress.
- First draft of network related issues and recommendations received and reviewed.
- Asset management and documentation of all network switches and routers configuration complete.

#### 3.1.2 Work Stream 2 (WBC & TRDC) - Virtual Server environment discovery and re-configuration

Virtual servers are in use to house several primary applications across both councils e.g. Revs & Bens, Income Management, Finance.

One of the main advantages of virtualisation is the ability to back up the environment more efficiently and therefore restore services faster. The current configuration of this environment does not fully take advantage of this; the re-configuration and rebuild will allow this to happen.

- A new virtual server farm has been built all 5 virtual server environments have been migrated to this. All systems housed on these servers have been tested in conjunction with service users.
- Processors within the virtual server that hosts the Revenues and Benefits system have been increased from 1 to 4 to improve performance.

- Old virtual servers decommissioned and redesigned for use with other systems.
- Additional work undertaken to extend the virtual server farm to incorporate Revenues and Benefits e-services requirements.

### 3.1.3 **Work Stream 3 (WBC and TRDC)** - Redesign and configuration of backup solution.

This work stream was originally identified as part of the replacement of the SAN project, as well as being highlighted as an issue within the outcomes of the Actica Infrastructure review.

There were limitations with backups on both sites relating to a lack of storage and an absence of documented site knowledge.

- A review of all business applications was completed which fed into the re-design.
- Completion of audit of current backups and discovery of existing server data requiring backup.
- New server hardware and upgraded tape system deployed.
- Redesign of new backup strategy complete as follows:
  - Ensure that primary systems are fully backed up as if in a DR situation and re-design all remaining system backups
  - Utilise the SAN to replicate backed up information between WBC and TRDC to provide resilience.
  - The next part of the infrastructure improvement work is to perform a DR test using these backups to ensure that the data backed up allows key systems to be recovered. This would be done in conjunction with our DR suppliers.

### 3.1.4 **Work Stream 4 (TRDC)** - Replacement SAN - Hardware design and procurement

This is an extension to the recent investment made on replacing the WBC SAN. Replacement of the existing TRDC SAN is required in order to increase the limited storage within the TRDC network.

This is required to meet business related projects such as back scanning of Tree Preservation Orders as well as supporting the requirements for backing up all data across TRDC.

- SAN solution design and estimation of sizing complete.
- Order placed and installation planned in mid-late February due to supplier availability.

### 3.1.5 **Work Stream 5 (WBC and TRDC)** - IT health check outcomes (ITHC) related to the Government Code of Connection

ITHC outcomes for both TRDC and WBC have been identified by a third party. This health check is part of the assessment requirement for both

authorities meeting the government code of connection (CoCo) statutory compliance.

- Project plan developed for implementing ITHC recommendations
- 22 patches had been applied across both networks as at week ending 6<sup>th</sup> January 2012

### 3.1.6 **Work Stream 6 (WBC)** - Thin client improvement.

Since the inception of thin client at WBC several years ago, the demand on this system has increased.

As well as the majority of WBC staff, there are now an additional number of users due to shared services. Changes in numbers and types of applications combined with the age of the servers has meant that the increased load on the servers has negatively impacted on the performance of the servers and the thin client experience overall.

The re-configuration of the virtual environment in work stream 2, will result in additional capacity to create more thin client servers, therefore spreading the overall load between the servers and increasing performance.

This is a short term solution, requiring a smaller investment and reduced resources to implement. A Thin Client refresh will be revisited once the future of the ICT Shared Service and its assets is clear.

- Load balancing hardware has been implemented to ensure that the load of users on each server is equal and unnecessary strain is not experienced on any individual servers.
- Performance enhancements have been made to the individual servers including installing more memory in order to optimise their usage.
- Profile server has been replaced and has resulted in decreased logging in times for staff
- Issues with the domain architecture were identified and resolved which also contributed to increased speed of logging into the network for thin client users.

However further work has been required as a result of the domain architecture issues. This includes a move of the main file server for WBC from the old domain into the new one which will be a significant task to perform without downtime. As a result, a new server has been built and is ready for transfer of data in the next programme of infrastructure improvements.

### 3.1.7 **Work Stream 7 (WBC and TRDC)** - Priority hardware replacement and/or remedial work.

The Actica Infrastructure review highlighted that approximately 30% of the servers across WBC and TRDC were experiencing issues affecting performance.

Some of these have been identified as more urgent than others and it is proposed that the business critical systems are remedied at this stage where possible, with the remaining servers remedied over Q4 of 11/12 and 12/13.

- TRDC Spam server replaced
- TRDC Proxy server replaced
- Remote access server virtualised
- Academy Live server processor increased from 1 to 4 to improve performance
- Proactive system (TRDC CRM), Express (TRDC Elections), M3 (TRDC Env Health) systems moved to virtual servers.

3.1.8 In conjunction with this programme, additional project work that was already committed to and essential changes have been carried out. These include:

- Income Management LIVE at WBC & TRDC – Completed
- Academy migration (R&B) from Unix to Windows - Completed
- EROS (WBC Elections system) Upgrade – Completed
- DTF Updates (Statutory change WBC & TRDC) – Completed
- Academy (R&B for WBC & TRDC) – Upgrade to 59.16 – Completed
- Academy (R&B for WBC & TRDC) – Upgrade to 60 & Ingres upgrade – Completed
- Victor (R&B) issue resolution for WBC & new installation TRDC – Completed
- PARIS (R&B – TRDC) – Installed – currently being tested by R&B
- Academy & Anite Integration (R&B) – Installed – client roll out being scheduled
- Uniform upgrades (TRDC & WBC) – In planning stages
- Revenues and Benefits e-services – in progress

3.1.9 The final highlight report (project close report) is due in the week commencing 17<sup>th</sup> January 2011, this will be sent to Joint Management Team along with a supporting document detailing the next steps and programme of infrastructure improvement work.

## 3.2 ICT Service Provision

Work has now been completed on the options appraisal of the alternative service delivery models for the ICT Shared Service. As members will recall a paper was presented to the Shared Services Joint Committee on 21<sup>st</sup> November which set out the preferred options for the future ICT service. A detailed plan of work has been developed that outlines activities leading up to and including the SERCO due diligence as well as the soft market testing.

In line with the work to produce the specification, in late December, a session with ICT staff was held in conjunction with Actica to explain what

the specification will look like and contain as well as giving them the opportunity to detail the work each job group does on behalf of the ICT Shared Service.

Regular updates are also published in staff magazines and members bulletins at both councils to keep the wider council staff and members informed of progress in this area.

Actica Consulting are currently developing the ICT requirements specification and Keith Thomas will give a verbal update on where we are with this work.

4.0 **Financial**

4.1 None specific to this report.

4.0 **Legal Issues** (Monitoring Officer)

5.1 None specific.